Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Nuclear Instruments and Methods in Physics Research A 507 (2003) 713–736
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH Section A
www.elsevier.com/locate/nima

Author Index

Abrahamyan, K., see Bakker, R. . . . 507 (2003) 210
Acerbi, E., see Alesini, D. . . . 507 (2003) 345
Acerbi, E., see Alesini, D. . . . 507 (2003) 502
Adachi, T., see Kamiya, J. . . . 507 (2003) 703
Agustsson, R., see Murokh, A. . . . 507 (2003) 417
Akesson, T., E. Arik, K. Assamagan, K. Baker, D. Benjamin, H. Bertelsen, V. Bytchkov, J. Callahan, M. Capeans-Garrido, A. Catinaccio, A. Cetin, P. Cwetanski, H. Danielsson, F. Dittus, B. Dolgoshein, N. Dressnandt, W.L. Ebenstein, P. Eerola, P. Farthouat, D. Froidevaux, Y. Grichkevitch, Z. Hajduk, J.R. Hansen, P.K. Keener, G. Kekelidze, S. Konovalov, T. Kowalski, V.A. Kramarenko, K. Kruger, B. Lundberg, F. Luehring, A. Manara, K. McFarlane, V.A. Mitsou, S. Morozov, S. Muraviev, A. Nadtochy, F.M. Newcomer, J. Olszowska, H. Ogren, S.H. Oh, V. Peshekhonov, M. Price, C. Rembser, A. Romaniouk, D.R. Rust, V. Schegelsky, M. Sapinski, A. Shmeleva, S. Smirnov, L.N. Smirnova, V. Sosnovtsev, S. Soutchkov, E. Spiridenkov, V. Tikhomirov, R. VanBerg, V. Vassilakopoulos, C. Wang and H.H. Williams, An X-ray scanner for wire chambers . . . 507 (2003) 622
Albertini, V.R., see Alesini, D. . . . 507 (2003) 345
Albertini, V.R., see Alesini, D. . . . 507 (2003) 502
Alesini, D., S. Bertolucci, M.E. Biagini, C. Biscari, R. Boni, M. Boscolo, M. Castellano, A. Clozza, G.D. Pirro, A. Drago, A. Esposito, M. Ferrario, V. Fusco, A. Gallo, A. Ghigo, S. Guiducci, M. Incurvati, P. Laurelli, C. Ligi, F. Marcellini, M. Migliorati, C. Milardi, L. Palumbo, L. Pellegrino, M. Preger, P. Raimondi, R. Ricci, C. Sanelli, F. Sgamma, B. Spataro, M. Serio, A. Stecchi, A. Stella, F. Tazzioli, C. Vaccarezza, M. Vescovi, C. Vicario, M. Zobov, E. Acerbi, F. Alessandria, D. Barni, G. Bellomo, C. Birattari, M. Bonardi, I. Boscolo, A. Bosotti, F. Broggi, S. Cialdi, C. DeMartinis, D. Giove, C. Maroli, P. Michelato, L. Monaco, C. Pagani, V. Petrillo, P. Pierini, L. Serafini, D. Sertore, G. Volpini, E. Chiadroni, G. Felici, D. Levi, M. Mastrucci, M. Mattioli, G. Medici, G.S. Petrarca, L. Catani, A. Cianchi, A. D'Angelo, R. Di Salvo, A. Fantini, D. Moricciani, C. Schaerf, R. Bartolini, F. Ciocci, G. Dattoli, A. Doria, F. Flora, G.P. Gallerano, L. Giannessi, E. Giovenale, G. Messina, L. Mezi, P.L. Ottaviani, L. Picardi, M. Quattromini, A. Renieri, C. Ronsivalle, L. Avaldi, C. Carbone, A. Cricenti, A. Pifferi, P. Perfetti, T. Prosperi, V.R. Albertini, C. Quaresima and N. Zema, Conceptual design of a high-brightness linac for soft X-ray SASE-FEL source . . . 507 (2003) 502
Alesini, D., S. Bertolucci, M.E. Biagini, C. Biscari, R. Boni, M. Boscolo, M. Castellano, A. Clozza, G. Di Pirro, A. Drago, A. Esposito, M. Ferrario, V. Fusco, A. Gallo, A. Ghigo, S. Guiducci, M. Incurvati, P. Laurelli, C. Ligi, F. Marcellini, M. Migliorati, C. Milardi, L. Palumbo, L. Pellegrino, M. Preger, P. Raimondi, R. Ricci, C. Sanelli, F. Sgamma, B. Spataro, M. Serio, A. Stecchi, A. Stella, F. Tazzioli, C. Vaccarezza, M. Vescovi, C. Vicario, M. Zobov, E. Acerbi, F. Alessandria, D. Barni, G. Bellomo, I. Boscolo, F. Broggi, S. Cialdi, C. DeMartinis, D. Giove, C. Maroli, V. Petrillo, M. Rome', L. Serafini, E. Chiadroni, G. Felici, D. Levi, M. Mastrucci, M. Mattioli, G. Medici, G.S. Petrarca, L. Catani, A. Cianchi, A. D'Angelo, R. Di Salvo, A. Fantini, D. Moricciani, C. Schaerf, R. Bartolini, F. Ciocci, G. Dattoli, A. Doria, F. Flora, G.P. Gallerano, L. Giannessi, E. Giovenale, G. Messina, L. Mezi, P.L. Ottaviani, L. Picardi, M. Quattromini, A. Renieri, C. Ronsivalle, L. Avaldi, C. Carbone, A. Cricenti, A. Pifferi, P. Perfetti, T. Prosperi, V.R. Albertini, C. Quaresima and N. Zema, The SPARC project: a high-brightness electron beam source at LNF to drive a SASE-FEL experiment. . . . 507 (2003) 345
Alessandria, F., see Alesini, D. . . . 507 (2003) 345
Alessandria, F., see Alesini, D. . . . 507 (2003) 502
Allgaier, G., see Blau, J. . . . 507 (2003) 44
Al-Shamma'a, A.I., see Petichakis, C.. . . . 507 (2003) 256
An, Xu, see Zhiwen, Hu . . . 507 (2003) 617
Ando, R., see Ginzburg, N.S. . . . 507 (2003) 61

doi:10.1016/S0168-9002(03)01937-5

Andrejczuk, A., see Juha, L. 507 (2003) 577
Arik, E., see Akesson, T. 507 (2003) 622
Armstead, R.L., see Colson, W.B. 507 (2003) 48
Artiukov, I., see Rocca, J.J. 507 (2003) 515
Arzhannikov, A.V., V.T. Astrelin, V.B. Bobylev, N.S. Ginzburg, V.G. Ivanenko, P.V. Kalinin, S.A. Kuznetsov, N.Yu. Peskov, P.V. Petrov, A.S. Sergeev, S.L. Sinitsky and V.D. Stepanov, Four-channel planar FEM for high-power mm-wave generation (theoretical and experimental problems) 507 (2003) 129
Asakawa, M., see Awazu, K. 507 (2003) 547
Asakawa, M., see Nishiyama, H. 507 (2003) 74
Asakawa, M., see Tsunawaki, Y. 507 (2003) 166
Asgekar, V., G. Berden, M. Brunken, L. Casper, H. Genz, M. Grigore, C. Heßler, S. Khodyachykh, A. Richter and A. F.G. van der Meer, Investigation of short pulse effects in IR FELs and new simulation results 507 (2003) 224
Assamagan, K., see Akesson, T. 507 (2003) 622
Astrelin, V.T., see Arzhannikov, A.V. 507 (2003) 129
Austin, R.H., A. Xie, L. van der Meer, M. Shinn and G. Neil, Self-trapped states in proteins 507 (2003) 561
Avaldi, L., see Alesini, D. 507 (2003) 345
Avaldi, L., see Alesini, D. 507 (2003) 502
Avetissian, A.K., see Avetissian, H.K. 507 (2003) 582
Avetissian, H.K. and G.F. Mkrtchian, X-ray Compton FEL based on charged particles channeling in a crystal 507 (2003) 479
Avetissian, H.K., A.K. Avetissian, G.F. Mkrtchian and Kh.V. Sedrakian, X-ray free electron laser for electron–positron pair production on the nuclei 507 (2003) 582
Avetissian, H.K., A.L. Khachatryan and G.F. Mkrtchian, High-gain FEL on the coherent Bremsstrahlung of a relativistic electron beam in a crystal 507 (2003) 31
Awazu, K., M. Asakawa and H. Horiike, Status report and biomedical applications of the institute of FEL, Osaka University 507 (2003) 547
Awazu, K., see Heya, M. 507 (2003) 564
Awazu, K., see Nishiyama, H. 507 (2003) 74
Ayvazyan, V., J.-P. Carneiro, P. Castro, B. Faatz, A.A. Fateev, J. Feldhaus, Ch. Gerth, V. Gretchko, B. Grigoryan, U. Hahn, K. Honkavaara, M. Hüning, R. Ischebeck, U. Jastrow, R. Kammering, J. Menzel, M. Minty, D. Nölle, J. Pflüger, P. Piot, L. Plucinski, K. Rehlich, J. Rossbach, E.L. Saldin, H. Schlarb, E.A. Schneidmiller, S. Schreiber, R. Sobierajski, B. Steeg, F. Stulle, K.P. Sytchev, K. Tiedtke, R. Treusch, H. Weise, M. Wendt and M.V. Yurkov, Study of the statistical properties of the radiation from a VUV SASE FEL operating in the femtosecond regime 507 (2003) 368

Baba, H., see Shintake, T. 507 (2003) 382
Babzien, M., see Murokh, A. 507 (2003) 417
Babzien, M., see Tremaine, A. 507 (2003) 445
Bähr, J., see Bakker, R. 507 (2003) 210
Bajt, S., see Kuba, J. 507 (2003) 475
Baker, G.R., see Shinn, M.D. 507 (2003) 196
Baker, K., see Akesson, T. 507 (2003) 622
Bakker, R., M.v. Hartrott, E. Jaeschke, D. Krämer, J.P. Carneiro, K. Flöttmann, P. Piot, J. Roßbach, S. Schreiber, K. Abrahamyan, J. Bähr, I. Bohnet, V. Djordjadze, U. Gensch, H.J. Graboschi, Z. Li, D. Lipka, A. Oppelt, B. Petrossyan, F. Stephan, P. Michelato, C. Pagani, D. Sertore, V. Miltchev, I. Tsakov, A. Liero, H. Redlin, W. Sandner, R. Schumann, I. Will, R. Cee, M. Krassilnikov, S. Setzer and T. Weiland, First beam measurements at the photo injector test facility at DESY Zeuthen 507 (2003) 210
Bakker, R., see Bocchetta, C.J. 507 (2003) 484
Bakshaev, Y.L., see Juha, L. 507 (2003) 577
Bandurkin, I.V., see Savilov, A.V. 507 (2003) 158
Barletta, W.A., see Bocchetta, C.J. 507 (2003) 484
Barletta, W.A., see Fawley, W.M. 507 (2003) 396
Barni, D., see Alesini, D. 507 (2003) 345
Barni, D., see Alesini, D. 507 (2003) 502
Bartnik, A., see Juha, L. 507 (2003) 577
Bartolini, R., see Alesini, D. 507 (2003) 345
Bartolini, R., see Alesini, D. 507 (2003) 502
Bartolini, R., see Bruni, C. 507 (2003) 285

Bartolini, R., see De Ninno, G. . . . 507 (2003) 274
Bartolini, R., see Rippon, C. . . . 507 (2003) 299
Baryshevsky, V.G. and K.G. Batrakov, Use of dynamical undulator mechanism to produce short wavelength radiation in volume FEL (VFEL) . . . 507 (2003) 35
Baryshevsky, V.G., K.G. Batrakov and V.I. Stolyarsky, Application of volume diffraction grating for TeraHertz lasing in volume FEL (VFEL) . . . 507 (2003) 93
Baryshevsky, V.G., K.G. Batrakov, A.A. Gurinovich, I.I. Ilienko, A.S. Lobko, P.V. Molchanov, V.I. Moroz, P.F. Sofronov and V.I. Stolyarsky, Progress of the volume FEL (VFEL) experiments in millimeter range . . 507 (2003) 137
Batrakov, K.G., see Baryshevsky, V.G. . . . 507 (2003) 35
Batrakov, K.G., see Baryshevsky, V.G. . . . 507 (2003) 93
Batrakov, K.G., see Baryshevsky, V.G. . . . 507 (2003) 137
Behre, C.P., see Shinn, M.D. . . . 507 (2003) 196
Bellomo, G., see Alesini, D. . . . 507 (2003) 345
Bellomo, G., see Alesini, D. . . . 507 (2003) 502
Bemmerer, D., see Formicola, A. . . . 507 (2003) 609
Benjamin, D., see Akesson, T. . . . 507 (2003) 622
Benson, S., Operation of an optical klystron with small dispersion . . . 507 (2003) 40
Benson, S.V., see Shinn, M.D. . . . 507 (2003) 196
Bentson, L., P. Bolton, E. Bong, P. Emma, J. Galayda, J. Hastings, P. Krejcik, C. Rago, J. Rifkin and C.M. Spencer, FEL research and development at the SLAC sub-picosecond photon source, SPPS . . . 507 (2003) 205
Benware, B., see Rocca, J.J. . . . 507 (2003) 515
Ben-Zvi, I., see Murokh, A. . . . 507 (2003) 417
Ben-Zvi, I., see Tremaine, A. . . . 507 (2003) 445
Berden, G., see Asgekar, V. . . . 507 (2003) 224
Berg, W.J., see Lumpkin, A.H. . . . 507 (2003) 200
Berg, W.J., see Lumpkin, A.H. . . . 507 (2003) 246
Bergé, L., see Simon, E. . . . 507 (2003) 643
Bertelsen, H., see Akesson, T. . . . 507 (2003) 622
Bertolini, L., see Murokh, A. . . . 507 (2003) 417
Bertolucci, S., see Alesini, D. . . . 507 (2003) 345
Bertolucci, S., see Alesini, D. . . . 507 (2003) 502
Bevins, M.E., see Shinn, M.D. . . . 507 (2003) 196
Biagini, M.E., see Alesini, D. . . . 507 (2003) 345
Biagini, M.E., see Alesini, D. . . . 507 (2003) 502
Biedron, S.G., see Bocchetta, C.J. . . . 507 (2003) 484
Biedron, S.G., see Lumpkin, A.H. . . . 507 (2003) 200
Biedron, S.G., see Lumpkin, A.H. . . . 507 (2003) 246
Bionta, R.M., see Kuba, J. . . . 507 (2003) 475
Birattari, C., see Alesini, D. . . . 507 (2003) 502
Biscari, C., see Alesini, D. . . . 507 (2003) 345
Biscari, C., see Alesini, D. . . . 507 (2003) 502
Blau, J., see Colson, W.B. . . . 507 (2003) 48
Blau, J., see Crooker, P.P. . . . 507 (2003) 52
Blau, J., V. Bouras, A. Kalfoutzos, G. Allgaier, T. Fontana, P.P. Crooker and W.B. Colson, Simulations of high-power free electron lasers with strongly focused electron and optical beams . . . 507 (2003) 44
Bluem, H., A.M.M. Todd, M.D. Cole, J. Rathke and T. Schultheiss, Recent advances in high-brightness electron guns at AES . . . 507 (2003) 215
Bobylev, V.B., see Arzhannikov, A.V. . . . 507 (2003) 129
Bocchetta, C.J., D. Bulfone, F. Cargnello, M. Danailov, G. D'Auria, B. Diviacco, M. Ferianis, A. Gambitta, E. Karantzoulis, G. Loda, M. Lonza, F. Mazzolini, D. Morelli, G. Pangon, V. Smaluk, M. Stefanutti, M. Svandrlik, L. Tosi, G. Tromba, A. Vascotto, R. Visintini, R. Bakker, W.A. Barletta, W.M. Fawley, R. Bonifacio, S.G. Biedron, M.D. Borland, S.V. Milton, S. De Silvestri, R.P. Walker, J.H. Wu and L.H. Yu, Overview of FERMI@ELETTRA: a proposed ultra-bright coherent X-ray source in Italy . . . 507 (2003) 484
Bocchetta, C.J., see Fawley, W.M. . . . 507 (2003) 396
Bohnet, I., see Bakker, R. . . . 507 (2003) 210
Boissel, P., see Maître, P. . . . 507 (2003) 541
Bolton, P., see Bentson, L. . . . 507 (2003) 205

Bolton, P.R., J.E. Clendenin, D.H. Dowell, P. Krejcik and J. Rifkin, Electro-optic sampling of single electron beam bunches of ultrashort duration . . . 507 (2003) 220
Bolton, P.R., see Dowell, D.H. . . . 507 (2003) 327
Bolton, P.R., see Dowell, D.H. . . . 507 (2003) 331
Bonardi, M., see Alesini, D. . . . 507 (2003) 502
Bonetti, R., see Formicola, A. . . . 507 (2003) 609
Bong, E., see Bentson, L. . . . 507 (2003) 205
Boni, R., see Alesini, D. . . . 507 (2003) 345
Boni, R., see Alesini, D. . . . 507 (2003) 502
Bonifacio, R., see Bocchetta, C.J. . . . 507 (2003) 484
Bonifacio, R., see Fawley, W.M. . . . 507 (2003) 396
Boody, F.P., see Juha, L. . . . 507 (2003) 577
Booth, R., see Kuba, J. . . . 507 (2003) 475
Borland, M., see Huang, Z. . . . 507 (2003) 318
Borland, M., see Lumpkin, A.H. . . . 507 (2003) 200
Borland, M., see Lumpkin, A.H. . . . 507 (2003) 246
Borland, M.D., see Bocchetta, C.J. . . . 507 (2003) 484
Boscolo, I., see Alesini, D. . . . 507 (2003) 345
Boscolo, I., see Alesini, D. . . . 507 (2003) 502
Boscolo, M., see Alesini, D. . . . 507 (2003) 345
Boscolo, M., see Alesini, D. . . . 507 (2003) 502
Bosotti, A., see Alesini, D. . . . 507 (2003) 502
Botman, J.I.M., see Thomas, C.A. . . . 507 (2003) 281
Boucaud, P., see Sauvage, S. . . . 507 (2003) 569
Bouras, V., see Blau, J. . . . 507 (2003) 44
Bouvier, R., see Simon, E. . . . 507 (2003) 643
Bras, F., see Sauvage, S. . . . 507 (2003) 569
Brau, C.A., see Lewellen, J.W. . . . 507 (2003) 323
Brefeld, W., B. Faatz, J. Feldhaus, M. Körfer, J. Krzywinski, T. Möller, J. Pflüger, E.L. Saldin, E.A. Schneidmiller, S. Schreiber and M.V. Yurkov, Scheme for time-resolved experiments based on the use of statistical properties of the third harmonic of the SASE FEL radiation . . . 507 (2003) 431
Broggi, F., see Alesini, D. . . . 507 (2003) 345
Broggi, F., see Alesini, D. . . . 507 (2003) 502
Broggini, C., see Formicola, A. . . . 507 (2003) 609
Broniatowski, A., see Simon, E. . . . 507 (2003) 643
Broquier, M., see Sauvage, S. . . . 507 (2003) 569
Brunhes, T., see Sauvage, S. . . . 507 (2003) 569
Bruni, C., G.L. Orlandi, D. Garzella, G. De Ninno, M.E. Couprie, R. Bartolini, C. Rippon and G. Dattoli, Super-ACO FEL oscillation with longitudinal to transverse coupled beam dynamics . . . 507 (2003) 285
Bruni, C., see Thomas, C.A. . . . 507 (2003) 281
Brunken, M., see Asgekar, V. . . . 507 (2003) 224
Büchner, A., see Teichert, J. . . . 507 (2003) 354
Bulfone, D., see Bocchetta, C.J. . . . 507 (2003) 484
Büttig, H., see Janssen, D. . . . 507 (2003) 314
Bytchkov, V., see Akesson, T. . . . 507 (2003) 622

Callahan, J., see Akesson, T. . . . 507 (2003) 622
Campbell, T., see Crooker, P.P. . . . 507 (2003) 52
Capeans-Garrido, M., see Akesson, T. . . . 507 (2003) 622
Carbone, C., see Alesini, D. . . . 507 (2003) 345
Carbone, C., see Alesini, D. . . . 507 (2003) 502
Cargnello, F., see Bocchetta, C.J. . . . 507 (2003) 484
Carneiro, J.-P., see Ayvazyan, V. . . . 507 (2003) 368
Carneiro, J.P., see Bakker, R. . . . 507 (2003) 210
Carr, G.L., see Neil, G.R. . . . 507 (2003) 537
Carr, G.L., see Neumann, J.G. . . . 507 (2003) 498
Carr, R., see Murokh, A. . . . 507 (2003) 417

Casella, C., see Formicola, A. 507 (2003) 609
Casper, L., see Asgekar, V. 507 (2003) 224
Castellano, M., see Alesini, D. 507 (2003) 345
Castellano, M., see Alesini, D. 507 (2003) 502
Castro, P., see Ayvazyan, V. 507 (2003) 368
Catani, L., see Alesini, D. 507 (2003) 345
Catani, L., see Alesini, D. 507 (2003) 502
Catinaccio, A., see Akesson, T. 507 (2003) 622
Cee, R., see Bakker, R. 507 (2003) 210
Cejnarová, A., see Juha, L. 507 (2003) 577
Cetin, A., see Akesson, T. 507 (2003) 622
Chae, Y.C., see Lumpkin, A.H. 507 (2003) 200
Chae, Y.C., see Lumpkin, A.H. 507 (2003) 246
Chambon, B., see Simon, E. 507 (2003) 643
Chang, X.Y., see Wang, X.J. 507 (2003) 310
Charity, R.J., see Vićić, M. 507 (2003) 636
Chernenko, A.S., see Juha, L. 507 (2003) 577
Chernyshev, A.V., see Nomaru, K. 507 (2003) 552
Chiadroni, E., see Alesini, D. 507 (2003) 345
Chiadroni, E., see Alesini, D. 507 (2003) 502
Cho, S.O., see Jeong, Y.U. 507 (2003) 125
Chvostová, D., see Juha, L. 507 (2003) 577
Cialdi, S., see Alesini, D. 507 (2003) 345
Cialdi, S., see Alesini, D. 507 (2003) 502
Cianchi, A., see Alesini, D. 507 (2003) 345
Cianchi, A., see Alesini, D. 507 (2003) 502
Ciocci, F., see Alesini, D. 507 (2003) 345
Ciocci, F., see Alesini, D. 507 (2003) 502
Clendenin, J.E., see Bolton, P.R. 507 (2003) 220
Clendenin, J.E., see Dowell, D.H. 507 (2003) 327
Clendenin, J.E., see Dowell, D.H. 507 (2003) 331
Clozza, A., see Alesini, D. 507 (2003) 345
Clozza, A., see Alesini, D. 507 (2003) 502
Cole, M.D., see Bluem, H. 507 (2003) 215
Colson, W., see Crooker, P.P. 507 (2003) 52
Colson, W.B., J. Blau and R.L. Armstead, The free electron laser interaction with a short-Rayleigh-length optical mode 507 (2003) 48
Colson, W.B., see Blau, J. 507 (2003) 44
Cornacchia, M., see Murokh, A. 507 (2003) 417
Cornacchia, M., see Tremaine, A. 507 (2003) 445
Corvisiero, P., see Formicola, A. 507 (2003) 609
Costantini, H., see Formicola, A. 507 (2003) 609
Couprie, M.E., Chaos studies on the super-ACO free electron laser 507 (2003) 1
Couprie, M.E., see Bruni, C. 507 (2003) 285
Couprie, M.E., see De Ninno, G. 507 (2003) 274
Couprie, M.E., see Rippon, C. 507 (2003) 299
Couprie, M.E., see Thomas, C.A. 507 (2003) 281
Crépin, C., see Sauvage, S. 507 (2003) 569
Cricenti, A., see Alesini, D. 507 (2003) 345
Cricenti, A., see Alesini, D. 507 (2003) 502
Crooker, P.P., see Blau, J. 507 (2003) 44
Crooker, P.P., T. Campbell, W. Ossenfort, S. Miller, J. Blau and W. Colson, A study of the stability of a high-power free electron laser utilizing a short Rayleigh length 507 (2003) 52
Cwetanski, P., see Akesson, T. 507 (2003) 622

Danailov, M., see Bocchetta, C.J. 507 (2003) 484
Danailov, M., see De Ninno, G. 507 (2003) 274

D'Angelo, A., see Alesini, D. . . . 507 (2003) 345
D'Angelo, A., see Alesini, D. . . . 507 (2003) 502
Danielsson, H., see Akesson, T. . . . 507 (2003) 622
Dattoli, G. and A. Renieri, Overview of proposed VUV and soft X-ray projects in the world . . . 507 (2003) 464
Dattoli, G., A. Doria, L. Giannessi and P.L. Ottaviani, Bunching and exotic undulator configurations in SASE FELs . . . 507 (2003) 388
Dattoli, G., L. Giannessi and P.L. Ottaviani, MOPA optical klystron FELs and coherent harmonic generation 507 (2003) 26
Dattoli, G., see Alesini, D. . . . 507 (2003) 345
Dattoli, G., see Alesini, D. . . . 507 (2003) 502
Dattoli, G., see Bruni, C. . . . 507 (2003) 285
Dattoli, G., see De Ninno, G. . . . 507 (2003) 274
Dattoli, G., see Rippon, C. . . . 507 (2003) 299
Dattoli, G., see Thomas, C.A. . . . 507 (2003) 281
D'Auria, G., see Bocchetta, C.J. . . . 507 (2003) 484
de Castro, A.R.B., see Schulz, J. . . . 507 (2003) 572
De Jésus, M., see Simon, E. . . . 507 (2003) 643
de Loos, M.J., C.A.J. van der Geer, S.B. van der Geer, A.F.G. van der Meer, D. Oepts and R. Wünsch, A 3D particle tracking technique for FEL start-up and saturation effects . . . 507 (2003) 97
De Ninno, G., M. Trovò, M. Danailov, M. Marsi, E. Karantzoulis, B. Diviacco, R.P. Walker, R. Bartolini, G. Dattoli, L. Giannessi, L. Mezi, M.E. Couprie, A. Gatto, N. Kaiser, S. Günster and D. Ristau, The UV European FEL at ELETTRA: towards compatibility of storage ring operation for FEL and synchrotron radiation. . . . 507 (2003) 274
De Ninno, G., see Bruni, C. . . . 507 (2003) 285
De Ninno, G., see Thomas, C.A. . . . 507 (2003) 281
De Silvestri, S., see Bocchetta, C.J. . . . 507 (2003) 484
Dejus, R.J., see Lumpkin, A.H. . . . 507 (2003) 200
Dejus, R.J., see Lumpkin, A.H. . . . 507 (2003) 246
Dejus, R.J., see Vasserman, I.B. . . . 507 (2003) 191
DeMartinis, C., see Alesini, D. . . . 507 (2003) 345
DeMartinis, C., see Alesini, D. . . . 507 (2003) 502
Demske, D., see Neumann, J.G. . . . 507 (2003) 498
Den Hartog, P.K., see Petra, M. . . . 507 (2003) 422
Derbenev, Y., see Zhang, Y. . . . 507 (2003) 459
Dillon-Townes, L.A., see Shinn, M.D. . . . 507 (2003) 196
DiMauro, L., A. Doyuran, W. Graves, R. Heese, E.D. Johnson, S. Krinsky, H. Loos, J.B. Murphy, G. Rakowsky, J. Rose, T. Shaftan, B. Sheehy, J. Skaritka, X.J. Wang and L.H. Yu, First SASE and seeded FEL lasing of the NSLS DUV FEL at 266 and 400 nm . . . 507 (2003) 15
Di Pirro, G., see Alesini, D. . . . 507 (2003) 345
Di Salvo, R., see Alesini, D. . . . 507 (2003) 345
Di Salvo, R., see Alesini, D. . . . 507 (2003) 502
Ditmire, T., see Kuba, J. . . . 507 (2003) 475
Dittus, F., see Akesson, T. . . . 507 (2003) 622
Diviacco, B., see Bocchetta, C.J. . . . 507 (2003) 484
Diviacco, B., see De Ninno, G. . . . 507 (2003) 274
Djordjadze, V., see Bakker, R. . . . 507 (2003) 210
Djurcic, Z., D. Glasgow, L.-W. Hu, R.D. McKeown, A. Piepke, R. Swinney and B. Tipton, Novel technique for ultra-sensitive determination of trace elements in organic scintillators. . . . 507 (2003) 680
Dolgoshein, B., see Akesson, T. . . . 507 (2003) 622
Donohue, J.T. and J.L. Rullier, Electron trajectories in a helical free-electron laser with or without an axial guide field . . . 507 (2003) 56
Doria, A., see Alesini, D. . . . 507 (2003) 345
Doria, A., see Alesini, D. . . . 507 (2003) 502
Doria, A., see Dattoli, G. . . . 507 (2003) 388
Douglas, D., see Freund, H.P. . . . 507 (2003) 373
Dowell, D.H., P.R. Bolton, J.E. Clendenin, P. Emma, S.M. Gierman, W.S. Graves, C.G. Limborg, B.F. Murphy and J.F. Schmerge, Slice emittance measurements at the SLAC gun test facility . . . 507 (2003) 327

Dowell, D.H., P.R. Bolton, J.E. Clendenin, S.M. Gierman, C.G. Limborg, B.F. Murphy, J.F. Schmerge and T. Shaftan, Longitudinal emittance measurements at the SLAC gun test facility 507 (2003) 331
Dowell, D.H., see Bolton, P.R. 507 (2003) 220
Dowell, D.H., see Gottschalk, S.C. 507 (2003) 181
Doyuran, A., see DiMauro, L. 507 (2003) 15
Doyuran, A., W. Graves, R. Heese, E.D. Johnson, S. Krinsky, H. Loos, J. Murphy, G. Rakowsky, J. Rose, T. Shaftan, B. Sheehy, J. Skaritka, X.J. Wang and L.H. Yu, Observation of SASE and amplified seed of the DUV-FEL at BNL 507 (2003) 392
Drago, A., see Alesini, D. 507 (2003) 345
Drago, A., see Alesini, D. 507 (2003) 502
Drain, D., see Simon, E. 507 (2003) 643
Dressnandt, N., see Akesson, T. 507 (2003) 622
Dumoulin, L., see Simon, E. 507 (2003) 643
Dunn, J., see Kuba, J. 507 (2003) 475
Dyer, G., see Kuba, J. 507 (2003) 475
Dylla, H.F., see Shinn, M.D. 507 (2003) 196

Ebenstein, W.L., see Akesson, T. 507 (2003) 622
Eerola, P., see Akesson, T. 507 (2003) 622
Elson, J.M., see Vićić, M. 507 (2003) 636
Emma, P., see Bentson, L. 507 (2003) 205
Emma, P., see Dowell, D.H. 507 (2003) 327
Emma, P., see Huang, Z. 507 (2003) 318
Emma, P., see Reiche, S. 507 (2003) 426
Erdmann, M., see Lumpkin, A.H. 507 (2003) 200
Erdmann, M., see Lumpkin, A.H. 507 (2003) 246
Eriksson, M., L.-J. Lindgren, E. Wallen and S. Werin, A cascaded optical klystron on an energy recovery linac – race track microtron 507 (2003) 470
Esarey, E., see Schroeder, C.B. 507 (2003) 110
Esposito, A., see Alesini, D. 507 (2003) 345
Esposito, A., see Alesini, D. 507 (2003) 502
Evtushenko, P., see Janssen, D. 507 (2003) 314
Evtushenko, P., see Teichert, J. 507 (2003) 354

Faatz, B., A.A. Fateev, K. Flöttmann, D. Nölle, Ph. Piot, E.L. Saldin, H. Schlarb, E.A. Schneidmiller, S. Schreiber, D. Sertore, K.P. Sytchev and M.V. Yurkov, VUV FEL driven RF gun 507 (2003) 350
Faatz, B., see Ayvazyan, V. 507 (2003) 368
Faatz, B., see Brefeld, W. 507 (2003) 431
Faatz, B., see Pflüger, J. 507 (2003) 186
Faatz, B., see Pflüger, J. 507 (2003) 228
Fantini, A., see Alesini, D. 507 (2003) 345
Fantini, A., see Alesini, D. 507 (2003) 502
Farthouat, P., see Akesson, T. 507 (2003) 622
Fateev, A.A., see Ayvazyan, V. 507 (2003) 368
Fateev, A.A., see Faatz, B. 507 (2003) 350
Fawley, W.M., see Bocchetta, C.J. 507 (2003) 484
Fawley, W.M., see Schroeder, C.B. 507 (2003) 110
Fawley, W.M., Some issues and subtleties in numerical simulation of X-ray FELs 507 (2003) 19
Fawley, W.M., W.A. Barletta, C.J. Bocchetta and R. Bonifacio, Simulation studies of a possible multi-stage XFEL at ELETTRA 507 (2003) 396
Feit, M.D., see Kuba, J. 507 (2003) 475
Feldhaus, J., E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov, Photon ring multi-user distribution system for soft X-ray SASE FEL laboratory 507 (2003) 510
Feldhaus, J., see Ayvazyan, V. 507 (2003) 368
Feldhaus, J., see Brefeld, W. 507 (2003) 431
Feldhaus, J., see Gerth, Ch. 507 (2003) 335
Feldhaus, J., see Ischebeck, R. 507 (2003) 175

Feldhaus, J., see Juha, L. 507 (2003) 577
Feldhaus, J., T. Möller, E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov, Pump–probe experiments in the femtosecond regime, combining first and third harmonics of SASE FEL radiation 507 (2003) 435
Feldl, E.J., see Shinn, M.D.. . . . . 507 (2003) 196
Feldman, D.W., see Jensen, K.L.. . . . . 507 (2003) 238
Felici, G., see Alesini, D. 507 (2003) 345
Felici, G., see Alesini, D. 507 (2003) 502
Ferianis, M., see Bocchetta, C.J. 507 (2003) 484
Ferrario, M., see Alesini, D. 507 (2003) 345
Ferrario, M., see Alesini, D. 507 (2003) 502
Fiedorowicz, H., see Juha, L. 507 (2003) 577
Filevich, J., see Rocca, J.J. 507 (2003) 515
Fill, E.E., see Kuba, J. 507 (2003) 475
Fishman, G., see Sauvage, S.. . . . . 507 (2003) 569
Flora, F., see Alesini, D.. . . . . 507 (2003) 345
Flora, F., see Alesini, D.. . . . . 507 (2003) 502
Flöttmann, K., see Bakker, R.. . . . . 507 (2003) 210
Flöttmann, K., see Faatz, B. 507 (2003) 350
Fontana, T., see Blau, J. 507 (2003) 44
Formicola, A., G. Imbriani, M. Junker, D. Bemmerer, R. Bonetti, C. Broggini, C. Casella, P. Corvisiero, H. Costantini, G. Gervino, C. Gustavino, A. Lemut, P. Prati, V. Roca, C. Rolfs, M. Romano, D. Schürmann, F. Strieder, F. Terrasi, H.-P. Trautvetter and S. Zavatarelli, The LUNA II 400 kV accelerator. 507 (2003) 609
Freitag, M., see Janssen, D. 507 (2003) 314
Freund, H.P., D. Douglas and P.G. O'Shea, Multiple-beam free-electron lasers 507 (2003) 373
Freund, H.P., P.G. O'Shea and J. Neumann, Simulation of prebunching in free-electron lasers 507 (2003) 400
Freund, H.P., see Nguyen, D.C. 507 (2003) 120
Frigola, P., see Murokh, A.. . . . . 507 (2003) 417
Froidevaux, D., see Akesson, T. 507 (2003) 622
Fujimoto, M., see Isoyama, G. 507 (2003) 234
Fujimoto, M., see Kato, R.. . . . . 507 (2003) 409
Fujita, K., see Kamiya, J. 507 (2003) 703
Fujita, M., see Ohigashi, N. 507 (2003) 250
Fukami, Y., see Heya, M.. . . . . 507 (2003) 564
Fukushima, S., see Kitamura, M. 507 (2003) 670
Furukawa, S., see Kato, R.. . . . . 507 (2003) 409
Fusco, V., see Alesini, D. 507 (2003) 345
Fusco, V., see Alesini, D. 507 (2003) 502

Gabriel, F., see Janssen, D.. . . . . 507 (2003) 314
Gabriel, F., see Teichert, J.. . . . . 507 (2003) 354
Galayda, J., see Bentson, L. 507 (2003) 205
Gallerano, G.P., see Alesini, D.. . . . . 507 (2003) 345
Gallerano, G.P., see Alesini, D.. . . . . 507 (2003) 502
Gallo, A., see Alesini, D. 507 (2003) 345
Gallo, A., see Alesini, D. 507 (2003) 502
Gambitta, A., see Bocchetta, C.J. 507 (2003) 484
Garzella, D., Mirrors issues for FELs 507 (2003) 170
Garzella, D., see Bruni, C. 507 (2003) 285
Garzella, D., see Rippon, C.. . . . . 507 (2003) 299
Garzella, D., see Thomas, C.A.. . . . . 507 (2003) 281
Gascon, J., see Simon, E. 507 (2003) 643
Gatto, A., see De Ninno, G.. . . . . 507 (2003) 274
Gavrilov, N.G., see Jeong, Y.U. 507 (2003) 125
Gavrilov, N.G., see Kazakevitch, G.M. 507 (2003) 146
Gavrilov, N.G., see Mikhailov, S.F.. . . . . 507 (2003) 294
Gensch, U., see Bakker, R.. . . . . 507 (2003) 210
Genz, H., see Asgekar, V.. . . . . 507 (2003) 224

Gérard, J.-M., see Sauvage, S. 507 (2003) 569
Gerth, Ch., J. Feldhaus, K. Honkavaara, K.D. Kavanagh, Ph. Piot, L. Plucinski, S. Schreiber and I. Will, Bunch length and phase stability measurements at the TESLA test facility 507 (2003) 335
Gerth, Ch., see Ayvazyan, V. 507 (2003) 368
Gerth, Ch., see Ischebeck, R. 507 (2003) 175
Gervino, G., see Formicola, A. 507 (2003) 609
Ghigo, A., see Alesini, D. 507 (2003) 345
Ghigo, A., see Alesini, D. 507 (2003) 502
Giannessi, L., see Alesini, D. 507 (2003) 345
Giannessi, L., see Alesini, D. 507 (2003) 502
Giannessi, L., see Dattoli, G. 507 (2003) 26
Giannessi, L., see Dattoli, G. 507 (2003) 388
Giannessi, L., see De Ninno, G. 507 (2003) 274
Giannessi, L., see Rippon, C. 507 (2003) 299
Gierman, S.M., see Dowell, D.H. 507 (2003) 327
Gierman, S.M., see Dowell, D.H. 507 (2003) 331
Ginzburg, N.S., I.V. Zotova, R.M. Rozental, A.S. Sergeev, M. Kamada, K. Kurihara, H. Shirasaka, R. Ando and K. Kamada, Increasing superradiant pulse peak power by using electron energy chirp 507 (2003) 61
Ginzburg, N.S., see Arzhannikov, A.V. 507 (2003) 129
Giove, D., see Alesini, D. 507 (2003) 345
Giove, D., see Alesini, D. 507 (2003) 502
Giovenale, E., see Alesini, D. 507 (2003) 345
Giovenale, E., see Alesini, D. 507 (2003) 502
Glasgow, D., see Djurcic, Z. 507 (2003) 680
Glotin, F., see Maître, P. 507 (2003) 541
Glotin, F., see Sauvage, S. 507 (2003) 569
Gottschalk, S.C., D.H. Dowell and D.C. Quimby, Permanent magnet systems for free-electron lasers 507 (2003) 181
Graboschi, H.J., see Bakker, R. 507 (2003) 210
Graves, W., see DiMauro, L. 507 (2003) 15
Graves, W., see Doyuran, A. 507 (2003) 392
Graves, W.S., see Dowell, D.H. 507 (2003) 327
Graves, W.S., see Neumann, J.G. 507 (2003) 498
Gretchko, V., see Ayvazyan, V. 507 (2003) 368
Grichkevitch, Y., see Akesson, T. 507 (2003) 622
Grigore, M., see Asgekar, V. 507 (2003) 224
Grigoryan, B., see Ayvazyan, V. 507 (2003) 368
Gubeli III, J.F., see Neil, G.R. 507 (2003) 537
Gubeli, J.F., see Shinn, M.D. 507 (2003) 196
Guiducci, S., see Alesini, D. 507 (2003) 345
Guiducci, S., see Alesini, D. 507 (2003) 502
Günster, S., see De Ninno, G. 507 (2003) 274
Gurinovich, A.A., see Baryshevsky, V.G. 507 (2003) 137
Gürtler, P., see Schulz, J. 507 (2003) 572
Gustavino, C., see Formicola, A. 507 (2003) 609

Haberstroh, Ch., see Janssen, D. 507 (2003) 314
Hadjout, J.-P., see Simon, E. 507 (2003) 643
Hahn, U., see Ayvazyan, V. 507 (2003) 368
Hahn, U., see Pflüger, J. 507 (2003) 228
Hajduk, Z., see Akesson, T. 507 (2003) 622
Hajima, R. and E.J. Minehara, Electron beam dynamics through a return-arc and a deceleration path of the JAERI energy-recovery linac 507 (2003) 141
Hajima, R., see Nishimori, N. 507 (2003) 79
Hajima, R., T. Shizuma, M. Sawamura, R. Nagai, N. Nishimori, N. Kikuzawa and E.J. Minehara, First demonstration of energy-recovery operation in the JAERI superconducting linac for a high-power free-electron laser 507 (2003) 115
Hama, H., see Hosaka, M. 507 (2003) 289
Hammarsten, E.C., see Rocca, J.J. 507 (2003) 515

Hansen, J.R., see Akesson, T. 507 (2003) 622
Hara, K., see Kamiya, J. 507 (2003) 703
Hara, T., see Shintake, T. 507 (2003) 382
Hartmann, B., see Janssen, D. 507 (2003) 314
Hartrott, M.v., see Bakker, R. 507 (2003) 210
Hashimoto, E., see Hayakawa, Y. 507 (2003) 404
Hashimoto, E., see Yokoyama, K. 507 (2003) 357
Hastings, J., see Bentson, L. 507 (2003) 205
Hatanaka, K., see Kamiya, J. 507 (2003) 703
Hayakawa, K., see Hayakawa, Y. 507 (2003) 404
Hayakawa, K., see Yokoyama, K. 507 (2003) 357
Hayakawa, Y., I. Sato, K. Hayakawa, T. Tanaka, K. Yokoyama, K. Kanno, T. Sakai, K. Ishiwata, K. Nakao and E. Hashimoto, Characteristics of the fundamental FEL and the higher harmonic generation at LEBRA 507 (2003) 404
Hayakawa, Y., see Yokoyama, K. 507 (2003) 357
Hayashi, K., see Hosaka, M. 507 (2003) 289
Heese, R., see DiMauro, L. 507 (2003) 15
Heese, R., see Doyuran, A. 507 (2003) 392
Heninger, M., see Maître, P. 507 (2003) 541
Heßler, C., see Asgekar, V. 507 (2003) 224
Heya, M., see Nishiyama, H. 507 (2003) 74
Heya, M., Y. Fukami, H. Nagats, Y. Nishida and K. Awazu, Gelatin ablation wavelength dependency in the range of 5.6–6.7 μm using a mid-infrared Free Electron Laser 507 (2003) 564
Hill, J., see Murokh, A. 507 (2003) 417
Honkavaara, K., see Ayvazyan, V. 507 (2003) 368
Honkavaara, K., see Gerth, Ch. 507 (2003) 335
Horiike, H., see Awazu, K. 507 (2003) 547
Hosaka, M., M. Katoh, A. Mochihashi, J. Yamazaki, K. Hayashi, Y. Takashima and H. Hama, Q-switching operation of the UVSOR-FEL 507 (2003) 289
Hu, L.-W., see Djurcic, Z. 507 (2003) 680
Huang, Z. and K.-J. Kim, Spontaneous and amplified radiation at the initial stage of a SASE FEL 507 (2003) 65
Huang, Z., M. Borland, P. Emma and K.-J. Kim, Theory and simulation of CSR microbunching in bunch compressors 507 (2003) 318
Huang, Z., see Li, Y. 507 (2003) 413
Huang, Z., see Lumpkin, A.H. 507 (2003) 200
Huang, Z., see Lumpkin, A.H. 507 (2003) 246
Huang, Z., see Sajaev, V. 507 (2003) 154
Hüning, M., see Ayvazyan, V. 507 (2003) 368

Igo, T., see Kato, R. 507 (2003) 409
Ilienko, I.I., see Baryshevsky, V.G. 507 (2003) 137
Imasaki, K., see Nishiyama, H. 507 (2003) 74
Imasaki, K., see Ohigashi, N. 507 (2003) 250
Imasaki, K., see Tsunawaki, Y. 507 (2003) 166
Imbriani, G., see Formicola, A. 507 (2003) 609
Inagaki, T., see Shintake, T. 507 (2003) 382
Incurvati, M., see Alesini, D. 507 (2003) 345
Incurvati, M., see Alesini, D. 507 (2003) 502
Isaka, S., see Kato, R. 507 (2003) 409
Ischebeck, R., J. Feldhaus, Ch. Gerth, E. Saldin, P. Schmüser, E. Schneidmiller, B. Steeg, K. Tiedtke, M. Tonutti, R. Treusch and M. Yurkov, Study of the transverse coherence at the TTF free electron laser 507 (2003) 175
Ischebeck, R., see Ayvazyan, V. 507 (2003) 368
Ishida, K., see Tanaka, H. 507 (2003) 657
Ishikawa, T., see Shintake, T. 507 (2003) 382
Ishiwata, K., see Hayakawa, Y. 507 (2003) 404
Ishiwata, K., see Yokoyama, K. 507 (2003) 357
Isoyama, G., M. Fujimoto, R. Kato, S. Yamamoto and K. Tsuchiya, Proposal for the edge-focusing wiggler for SASE 507 (2003) 234
Isoyama, G., see Kato, R. 507 (2003) 409

Ivanenko, V.G., see Arzhannikov, A.V. 507 (2003) 129
Ivanov, M.I., see Juha, L. 507 (2003) 577

Jaeschke, E., see Bakker, R. 507 (2003) 210
Jankowska, E., see Rocca, J.J. 507 (2003) 515
Janssen, D., H. Büttig, P. Evtushenko, M. Freitag, F. Gabriel, B. Hartmann, U. Lehnert, P. Michel, K. Möller, T. Quast, B. Reppe, A. Schamlott, Ch. Schneider, R. Schurig, J. Teichert, S. Konstantinov, S. Kruchkov, A. Kudryavtsev, O. Myskin, V. Petrov, A. Tribendis, V. Volkov, W. Sandner, I. Will, A. Matheisen, W. Moeller, M. Pekeler, P.v. Stein and Ch. Haberstroh, First operation of a superconducting RF-gun 507 (2003) 314
Jastrow, U., see Ayvazyan, V. 507 (2003) 368
Jensen, K.L., D.W. Feldman and P.G. O'Shea, Advanced photocathode simulation and theory 507 (2003) 238
Jeong, Y.U., G.M. Kazakevitch, B.C. Lee, S.O. Cho, J. Yoo, N.G. Gavrilov and V.V. Kubarev, Upgrade of a compact FIR FEL driven by a magnetron-based microtron for the wavelength range of 100–300 μm 507 (2003) 125
Jeong, Y.U., see Kazakevitch, G.M. 507 (2003) 146
Jeong, Y.U., see Kubarev, V.V. 507 (2003) 523
Johnson, E., see Murokh, A. 507 (2003) 417
Johnson, E.D., see DiMauro, L. 507 (2003) 15
Johnson, E.D., see Doyuran, A. 507 (2003) 392
Jones, W., see Maître, P. 507 (2003) 541
Jordan, K., see Neil, G.R. 507 (2003) 537
Juha, L., J. Krása, A. Cejnarová, D. Chvostová, V. Vorlíček, J. Krzywinski, R. Sobierajski, A. Andrejczuk, M. Jurek, D. Klinger, H. Fiedorowicz, A. Bartnik, M. Pfeifer, P. Kubát, L. Pína, J. Kravárik, P. Kubeš, Y.L. Bakshaev, V.D. Korolev, A.S. Chernenko, M.I. Ivanov, M. Scholz, L. Ryc, J. Feldhaus, J. Ullschmied and F.P. Boody, Ablation of various materials with intense XUV radiation 507 (2003) 577
Juillard, A., see Simon, E. 507 (2003) 643
Junker, M., see Formicola, A. 507 (2003) 609
Jurek, M., see Juha, L. 507 (2003) 577

Kaiser, N., see De Ninno, G. 507 (2003) 274
Kalfoutzos, A., see Blau, J. 507 (2003) 44
Kalinin, P.V., see Arzhannikov, A.V. 507 (2003) 129
Kamada, K., see Ginzburg, N.S. 507 (2003) 61
Kamada, M., see Ginzburg, N.S. 507 (2003) 61
Kaminsky, A.K., see Savilov, A.V. 507 (2003) 162
Kamiya, J., K. Hatanaka, T. Adachi, K. Fujita, K. Hara, T. Kawabata, T. Noro, H. Sakaguchi, N. Sakamoto, Y. Sakemi, Y. Shimbara, Y. Shimizu, S. Terashima, M. Uchida, T. Wakasa, Y. Yasuda, H.P. Yoshida and M. Yosoi, Calibration of the effective analyzing power for a ^{3}He polarimeter at 443 MeV 507 (2003) 703
Kammering, R., see Ayvazyan, V. 507 (2003) 368
Kanno, K., see Hayakawa, Y. 507 (2003) 404
Kanno, K., see Yokoyama, K. 507 (2003) 357
Karantzoulis, E., see Bocchetta, C.J. 507 (2003) 484
Karantzoulis, E., see De Ninno, G. 507 (2003) 274
Kato, R., M. Fujimoto, T. Igo, S. Isaka, T. Onishi, S. Furukawa, S. Okuda, S. Suemine and G. Isoyama, Characteristic measurements of higher harmonics generated in the SASE-FEL process 507 (2003) 409
Kato, R., see Isoyama, G. 507 (2003) 234
Katoh, M., see Hosaka, M. 507 (2003) 289
Kavanagh, K.D., see Gerth, Ch. 507 (2003) 335
Kawabata, T., see Kamiya, J. 507 (2003) 703
Kawai, M., see Koike, H. 507 (2003) 242
Kawai, M., see Yokoyama, M. 507 (2003) 261
Kawamura, N., see Tanaka, H. 507 (2003) 657
Kazakevitch, G.M., see Jeong, Y.U. 507 (2003) 125
Kazakevitch, G.M., see Kubarev, V.V. 507 (2003) 523
Kazakevitch, G.M., Y.U. Jeong, B.C. Lee, N.G. Gavrilov and M.N. Kondaurov, Variable-energy microtron-injector for a compact wide-band FIR free electron laser 507 (2003) 146
Keener, P.K., see Akesson, T. 507 (2003) 622
Kekelidze, G., see Akesson, T. 507 (2003) 622

Khachatryan, A.L., see Avetissian, H.K. 507 (2003) 31
Khodyachykh, S., see Asgekar, V. 507 (2003) 224
Kii, T., K. Yamane, I. Tometaka, K. Masuda, H. Ohgaki, K. Yoshikawa and T. Yamazaki, Improvement of electron beam properties by reducing back-bombardment effects in a thermionic RF gun 507 (2003) 340
Kii, T., see Masuda, K. 507 (2003) 133
Kii, T., see Ohgaki, H. 507 (2003) 150
Kikuzawa, N., see Hajima, R. 507 (2003) 115
Kim, K., see Huang, Z. 507 (2003) 318
Kim, K.-B., see Nam, S.-K. 507 (2003) 69
Kim, K.-J., see Huang, Z. 507 (2003) 65
Kim, K.-J., see Lumpkin, A.H. 507 (2003) 200
Kim, K.-J., see Lumpkin, A.H. 507 (2003) 246
Kim, Y.J., see Shintake, T. 507 (2003) 382
Kitamura, H., see Shintake, T. 507 (2003) 382
Kitamura, M., H. Yoshikawa, T. Mochizuki, T. Tanaka and S. Fukushima, Thermal analysis of YB_{66} crystal of BL15XU at SPring-8 by finite element method. 507 (2003) 670
Klaisner, L., see Murokh, A. 507 (2003) 417
Klinger, D., see Juha, L. 507 (2003) 577
Koike, H., M. Sobajima, V.M. Popik, M. Yokoyama, F. Oda, M. Kawai, K. Toyoda, H. Kuroda and K. Nakai, Design and study of FIR FEL device using S-band linac at FEL-SUT. 507 (2003) 242
Koike, H., see Yokoyama, M. 507 (2003) 261
Kondaurov, M.N., see Kazakevitch, G.M. 507 (2003) 146
Konovalov, S., see Akesson, T. 507 (2003) 622
Konstantinov, S., see Janssen, D. 507 (2003) 314
Körfer, M., see Brefeld, W. 507 (2003) 431
Korolev, V.D., see Juha, L. 507 (2003) 577
Kowalski, T., see Akesson, T. 507 (2003) 622
Kramarenko, V.A., see Akesson, T. 507 (2003) 622
Krämer, D., see Bakker, R. 507 (2003) 210
Krása, J., see Juha, L. 507 (2003) 577
Krassilnikov, M., see Bakker, R. 507 (2003) 210
Kravárik, J., see Juha, L. 507 (2003) 577
Krejcik, P., see Bentson, L. 507 (2003) 205
Krejcik, P., see Bolton, P.R. 507 (2003) 220
Krinsky, S., see DiMauro, L. 507 (2003) 15
Krinsky, S., see Doyuran, A. 507 (2003) 392
Kruchkov, S., see Janssen, D. 507 (2003) 314
Kruger, K., see Akesson, T. 507 (2003) 622
Krzywinski, J., see Brefeld, W. 507 (2003) 431
Krzywinski, J., see Juha, L. 507 (2003) 577
Kuba, J., A. Wootton, R.M. Bionta, R. Shepherd, E.E. Fill, T. Ditmire, G. Dyer, R.A. London, V.N. Shlyaptsev, J. Dunn, R. Booth, S. Bajt, R.F. Smith, M.D. Feit, R. Levesque and M. McKernan, X-ray optics research for free electron lasers: study of material damage under extreme fluxes 507 (2003) 475
Kubát, P., see Juha, L. 507 (2003) 577
Kubarev, V.V., G.M. Kazakevitch, Y.U. Jeong and B.C. Lee, Quasi-optical highly sensitive Schottky-barrier detector for a wide-band FIR FEL 507 (2003) 523
Kubarev, V.V., see Jeong, Y.U. 507 (2003) 125
Kubeš, P., see Juha, L. 507 (2003) 577
Kudryavtsev, A., see Janssen, D. 507 (2003) 314
Kurihara, K., see Ginzburg, N.S. 507 (2003) 61
Kuroda, H., see Koike, H. 507 (2003) 242
Kuroda, H., see Nomaru, K. 507 (2003) 552
Kuroda, H., see Yokoyama, M. 507 (2003) 261
Kuznetsov, S.A., see Arzhannikov, A.V. 507 (2003) 129

Laarmann, T., see Schulz, J. 507 (2003) 572
Laasch, W., see Schulz, J. 507 (2003) 572

Lassiter, R.D., see Shinn, M.D. 507 (2003) 196
Laurelli, P., see Alesini, D. 507 (2003) 345
Laurelli, P., see Alesini, D. 507 (2003) 502
Le Caër, S., see Maître, P. 507 (2003) 541
Lee, B.C., see Jeong, Y.U. 507 (2003) 125
Lee, B.C., see Kazakevitch, G.M. 507 (2003) 146
Lee, B.C., see Kubarev, V.V. 507 (2003) 523
Lehnert, U., see Janssen, D. 507 (2003) 314
Lehnert, U., see Teichert, J. 507 (2003) 354
Lemaire, J., see Maître, P. 507 (2003) 541
Lemut, A., see Formicola, A. 507 (2003) 609
Le Sage, G., see Murokh, A. 507 (2003) 417
Levesque, R., see Kuba, J. 507 (2003) 475
Levi, D., see Alesini, D. 507 (2003) 345
Levi, D., see Alesini, D. 507 (2003) 502
Lewellen, J., see Li, Y. 507 (2003) 413
Lewellen, J.W. and C.A. Brau, RF Photoelectric injectors using needle cathodes 507 (2003) 323
Lewellen, J.W., see Lumpkin, A.H. 507 (2003) 200
Lewellen, J.W., see Lumpkin, A.H. 507 (2003) 246
Li, R., see Zhang, Y. 507 (2003) 459
Li, Y., J. Lewellen, Z. Huang, V. Sajaev and S.V. Milton, Time-resolved measurement of a self-amplified free-electron laser. 507 (2003) 413
Li, Y., see Lumpkin, A.H. 507 (2003)
Li, Y., see Lumpkin, A.H. 507 (2003) 200
Li, Z., see Bakker, R. 507 (2003) 210
Libkind, M., see Murokh, A. 507 (2003) 417
Liero, A., see Bakker, R. 507 (2003) 210
Ligi, C., see Alesini, D. 507 (2003) 345
Ligi, C., see Alesini, D. 507 (2003) 502
Lijun, Wu, see Zhiwen, Hu 507 (2003) 617
Limborg, C., Design considerations for the LCLS 507 (2003) 378
Limborg, C.G., see Dowell, D.H. 507 (2003) 327
Limborg, C.G., see Dowell, D.H. 507 (2003) 331
Lindgren, L.-J., see Eriksson, M. 507 (2003) 470
Lipka, D., see Bakker, R. 507 (2003) 210
Litvinenko, V.N., New results and prospects for harmonic generation in storage ring FELs 507 (2003) 265
Litvinenko, V.N., Recent results with the high intensity γ-ray facility 507 (2003) 527
Litvinenko, V.N., see Mikhailov, S.F. 507 (2003) 294
Liu, H., J. Talnagi and D.W. Miller, Neutron radiation effects on Fabry–Perot fiber optic sensors 507 (2003) 691
Lobko, A.S., see Baryshevsky, V.G. 507 (2003) 137
Lobo, R.P.S.M., see Sauvage, S. 507 (2003) 569
Loda, G., see Bocchetta, C.J. 507 (2003) 484
London, R.A., see Kuba, J. 507 (2003) 475
Lonza, M., see Bocchetta, C.J. 507 (2003) 484
Loos, H., see DiMauro, L. 507 (2003) 15
Loos, H., see Doyuran, A. 507 (2003) 392
Loos, H., see Neumann, J.G. 507 (2003) 498
Lucas, J., see Petichakis, C. 507 (2003) 256
Luehring, F., see Akesson, T. 507 (2003) 622
Lumpkin, A.H., S.G. Biedron, R.J. Dejus, W.J. Berg, M. Borland, Y.C. Chae, M. Erdmann, Z. Huang, K.-J. Kim, Y. Li, J.W. Lewellen, S.V. Milton, E. Moog, V. Sajaev and B.X. Yang, Observations of z-dependent microbunching harmonic intensities using COTR in a SASE FEL 507 (2003) 246
Lumpkin, A.H., Y.C. Chae, J.W. Lewellen, W.J. Berg, M. Borland, S.G. Biedron, R.J. Dejus, M. Erdmann, Z. Huang, K.-J. Kim, Y. Li, S.V. Milton, E.R. Moog, D.W. Rule, V. Sajaev and B.X. Yang, Evidence for transverse dependencies in COTR and microbunching in a SASE FEL 507 (2003) 200
Lundberg, B., see Akesson, T. 507 (2003) 622
Luther, B., see Rocca, J.J. 507 (2003) 515

Maître, P., S. Le Caër, A. Simon, W. Jones, J. Lemaire, H. Mestdagh, M. Heninger, G. Mauclaire, P. Boissel, R. Prazeres, F. Glotin and J.-M. Ortega, Ultrasensitive spectroscopy of ionic reactive intermediates in the gas phase performed with the first coupling of an IR FEL with an FTICR-MS 507 (2003) 541
Makarov, O.A., see Vasserman, I.B. 507 (2003) 191
Malone, R., see Murokh, A. 507 (2003) 417
Malone, R., see Tremaine, A. 507 (2003) 445
Manara, A., see Akesson, T. 507 (2003) 622
Marcellini, F., see Alesini, D. 507 (2003) 345
Marcellini, F., see Alesini, D. 507 (2003) 502
Marconi, M.C., see Rocca, J.J. 507 (2003) 515
Maroli, C., see Alesini, D. 507 (2003) 345
Maroli, C., see Alesini, D. 507 (2003) 502
Marsi, M., see De Ninno, G. 507 (2003) 274
Martin, F.D., see Shinn, M.D. 507 (2003) 196
Martin, M.C., see Neil, G.R. 507 (2003) 537
Martineau, O., see Simon, E. 507 (2003) 643
Mastrucci, M., see Alesini, D. 507 (2003) 345
Mastrucci, M., see Alesini, D. 507 (2003) 502
Masuda, K., S. Matsumura, T. Kii, H. Ohgaki, T. Yamazaki, K. Nagasaki and K. Yoshikawa, A simulation study on energy recovery from spent electron beams in an S-band linac 507 (2003) 133
Masuda, K., see Kii, T. 507 (2003) 340
Masuda, K., see Ohgaki, H. 507 (2003) 150
Matheisen, A., see Janssen, D. 507 (2003) 314
Matsumoto, H., see Shintake, T. 507 (2003) 382
Matsumura, S., see Masuda, K. 507 (2003) 133
Mattioli, M., see Alesini, D. 507 (2003) 345
Mattioli, M., see Alesini, D. 507 (2003) 502
Mauclaire, G., see Maître, P. 507 (2003) 541
Mazzolini, F., see Bocchetta, C.J. 507 (2003) 484
McFarlane, K., see Akesson, T. 507 (2003) 622
McKeown, R.D., see Djurcic, Z. 507 (2003) 680
McKernan, M., see Kuba, J. 507 (2003) 475
McKinney, W.R., see Neil, G.R. 507 (2003) 537
Mc Neil, B.W.J., see Poole, M.W. 507 (2003) 489
Medici, G., see Alesini, D. 507 (2003) 345
Medici, G., see Alesini, D. 507 (2003) 502
Meijer, G., see Redlich, B. 507 (2003) 556
Meijer, G.J.M., see Militsyn, B.L. 507 (2003) 494
Menzel, J., see Ayvazyan, V. 507 (2003) 368
Messina, G., see Alesini, D. 507 (2003) 345
Messina, G., see Alesini, D. 507 (2003) 502
Mestdagh, H., see Maître, P. 507 (2003) 541
Mezi, L., see Alesini, D. 507 (2003) 345
Mezi, L., see Alesini, D. 507 (2003) 502
Mezi, L., see De Ninno, G. 507 (2003) 274
Michel, P., see Janssen, D. 507 (2003) 314
Michel, P., see Teichert, J. 507 (2003) 354
Michelato, P., see Alesini, D. 507 (2003) 502
Michelato, P., see Bakker, R. 507 (2003) 210
Migliorati, M., see Alesini, D. 507 (2003) 345
Migliorati, M., see Alesini, D. 507 (2003) 502
Mikhailov, S.F., V.N. Litvinenko, N.G. Gavrilov, O.A. Shevchenko, N.A. Vinokurov and P.D. Vobly, Improvement of the field quality in the helical wigglers for the OK-5 VUV FEL at Duke 507 (2003) 294
Milardi, C., see Alesini, D. 507 (2003) 345
Milardi, C., see Alesini, D. 507 (2003) 502
Militsyn, B.L., G. von Helden, G.J.M. Meijer and A.F.G. van der Meer, FELICE—the free electron laser for intra-cavity experiments 507 (2003) 494

Miller, D.W., see Liu, H. 507 (2003) 691
Miller, S., see Crooker, P.P. 507 (2003) 52
Miltchev, V., see Bakker, R. 507 (2003) 210
Milton, S.V., see Bocchetta, C.J. 507 (2003) 484
Milton, S.V., see Li, Y. 507 (2003) 413
Milton, S.V., see Lumpkin, A.H. 507 (2003) 200
Milton, S.V., see Lumpkin, A.H. 507 (2003) 246
Mima, K., see Ohigashi, N. 507 (2003) 250
Mima, K., see Tsunawaki, Y. 507 (2003) 166
Minehara, E.J., see Hajima, R. 507 (2003) 115
Minehara, E.J., see Hajima, R. 507 (2003) 141
Minehara, E.J., see Nishimori, N. 507 (2003) 79
Minty, M., see Ayvazyan, V. 507 (2003) 368
Mitsou, V.A., see Akesson, T. 507 (2003) 622
Mkrtchian, G.F., see Avetissian, H.K. 507 (2003) 31
Mkrtchian, G.F., see Avetissian, H.K. 507 (2003) 479
Mkrtchian, G.F., see Avetissian, H.K. 507 (2003) 582
Mochihashi, A., see Hosaka, M. 507 (2003) 289
Mochizuki, T., see Kitamura, M. 507 (2003) 670
Moeller, W., see Janssen, D. 507 (2003) 314
Molchanov, P.V., see Baryshevsky, V.G. 507 (2003) 137
Möller, K., see Janssen, D. 507 (2003) 314
Möller, T., see Brefeld, W. 507 (2003) 431
Möller, T., see Feldhaus, J. 507 (2003) 435
Möller, Th., see Schulz, J. 507 (2003) 572
Monaco, L., see Alesini, D. 507 (2003) 502
Moog, E., see Lumpkin, A.H. 507 (2003) 246
Moog, E.R., see Lumpkin, A.H. 507 (2003) 200
Moog, E.R., see Petra, M. 507 (2003) 422
Moog, E.R., see Vasserman, I.B. 507 (2003) 191
Moon, S., see Rocca, J.J. 507 (2003) 515
Morelli, D., see Bocchetta, C.J. 507 (2003) 484
Moricciani, D., see Alesini, D. 507 (2003) 345
Moricciani, D., see Alesini, D. 507 (2003) 502
Moroz, V.I., see Baryshevsky, V.G. 507 (2003) 137
Morozov, S., see Akesson, T. 507 (2003) 622
Muraviev, S., see Akesson, T. 507 (2003) 622
Murokh, A., R. Agustsson, M. Babzien, I. Ben-Zvi, L. Bertolini, K. van Bibber, R. Carr, M. Cornacchia, P. Frigola, J. Hill, E. Johnson, L. Klaisner, G. Le Sage, M. Libkind, R. Malone, H.-D. Nuhn, C. Pellegrini, S. Reiche, G. Rakowsky, J. Rosenzweig, R. Ruland, J. Skaritka, A. Toor, A. Tremaine, X. Wang and V. Yakimenko, Results of the VISA SASE FEL experiment at 840 nm 507 (2003) 417
Murokh, A., see Tremaine, A. 507 (2003) 445
Murphy, B.F., see Dowell, D.H. 507 (2003) 327
Murphy, B.F., see Dowell, D.H. 507 (2003) 331
Murphy, J., see Doyuran, A. 507 (2003) 392
Murphy, J.B., see DiMauro, L. 507 (2003) 15
Myskin, O., see Janssen, D. 507 (2003) 314

Nadtochy, A., see Akesson, T. 507 (2003) 622
Nagai, R., see Hajima, R. 507 (2003) 115
Nagai, R., see Nishimori, N. 507 (2003) 79
Nagamine, K., see Tanaka, H. 507 (2003) 657
Nagasaki, K., see Masuda, K. 507 (2003) 133
Nagats, H., see Heya, M. 507 (2003) 564
Nakai, K., see Koike, H. 507 (2003) 242
Nakai, K., see Yokoyama, M. 507 (2003) 261
Nakai, S., see Ohigashi, N. 507 (2003) 250

Nakamura, S.N., see Tanaka, H. . . . 507 (2003) 657
Nakao, K., see Hayakawa, Y. . . . 507 (2003) 404
Nam, S.-K. and K.-B. Kim, Chaotic behaviour in a realizable helical-wiggler field . . . 507 (2003) 69
Neil, G., see Austin, R.H. . . . 507 (2003) 561
Neil, G.R., G.L. Carr, J.F. Gubeli III, K. Jordan, M.C. Martin, W.R. McKinney, M. Shinn, M. Tani, G.P. Williams and X.-C. Zhang, Production of high power femtosecond terahertz radiation. . . . 507 (2003) 537
Neil, G.R., see Shinn, M.D. . . . 507 (2003) 196
Neumann, J., see Freund, H.P. . . . 507 (2003) 400
Neumann, J.G., P.G. O'Shea, D. Demske, W.S. Graves, B. Sheehy, H. Loos and G.L. Carr, Electron beam modulation using a laser-driven photocathode . . . 507 (2003) 498
Newcomer, F.M., see Akesson, T. . . . 507 (2003) 622
Nguyen, D.C. and H.P. Freund, Possibility of a high-power, high-gain FEL amplifier . . . 507 (2003) 120
Nishida, Y., see Heya, M. . . . 507 (2003) 564
Nishimori, N., R. Hajima, R. Nagai and E.J. Minehara, Formation of an FEL field with uniform and constant phase due to the slippage effect . . . 507 (2003) 79
Nishimori, N., see Hajima, R. . . . 507 (2003) 115
Nishiyama, H., M. Asakawa, Y. Tsunawaki, M. Heya, K. Awazu and K. Imasaki, Dynamics of low coupling parameter free-electron laser oscillator. . . . 507 (2003) 74
Nölle, D., see Ayvazyan, V. . . . 507 (2003) 368
Nölle, D., see Faatz, B. . . . 507 (2003) 350
Nomaru, K., A.V. Chernyshev, A.K. Petrov and H. Kuroda, Novel process of isotope separation of silicon by use of IR FEL . . . 507 (2003) 552
Nomaru, K., see Yokoyama, M. . . . 507 (2003) 261
Noro, T., see Kamiya, J. . . . 507 (2003) 703
Nuhn, H.-D., see Murokh, A. . . . 507 (2003) 417
Nuhn, H.-D., see Tremaine, A. . . . 507 (2003) 445

Oda, F., see Koike, H. . . . 507 (2003) 242
Oda, F., see Yokoyama, M. . . . 507 (2003) 261
Oepts, D., see de Loos, M.J. . . . 507 (2003) 97
Ogren, H., see Akesson, T. . . . 507 (2003) 622
Oh, S.H., see Akesson, T. . . . 507 (2003) 622
Ohgaki, H., I. Tometaka, K. Yamane, T. Kii, K. Masuda, K. Yoshikawa and T. Yamazaki, Design studies of IR-FEL system at IAE, Kyoto University . . . 507 (2003) 150
Ohgaki, H., see Kii, T. . . . 507 (2003) 340
Ohgaki, H., see Masuda, K. . . . 507 (2003) 133
Ohigashi, N., see Tsunawaki, Y. . . . 507 (2003) 166
Ohigashi, N., Y. Tsunawaki, M. Fujita, K. Imasaki, K. Mima and S. Nakai, Construction of compact FEM using solenoid-induced helical wiggler . . . 507 (2003) 250
Okuda, S., see Kato, R. . . . 507 (2003) 409
Olszowska, J., see Akesson, T. . . . 507 (2003) 622
Onishi, T., see Kato, R. . . . 507 (2003) 409
Oppelt, A., see Bakker, R. . . . 507 (2003) 210
Orlandi, G.L., see Bruni, C. . . . 507 (2003) 285
Ortega, J.-M., see Maître, P. . . . 507 (2003) 541
Ortega, J.M., see Sauvage, S. . . . 507 (2003) 569
Ortega, J.M., Two-color experiments with infrared lasers. . . . 507 (2003) 8
O'Shea, P.G., see Freund, H.P. . . . 507 (2003) 373
O'Shea, P.G., see Freund, H.P. . . . 507 (2003) 400
O'Shea, P.G., see Jensen, K.L. . . . 507 (2003) 238
O'Shea, P.G., see Neumann, J.G. . . . 507 (2003) 498
Ossenfort, W., see Crooker, P.P. . . . 507 (2003) 52
Ottaviani, P.L., see Alesini, D. . . . 507 (2003) 345
Ottaviani, P.L., see Alesini, D. . . . 507 (2003) 502
Ottaviani, P.L., see Dattoli, G. . . . 507 (2003) 26
Ottaviani, P.L., see Dattoli, G. . . . 507 (2003) 388

Pagani, C., see Alesini, D. . . . 507 (2003) 502
Pagani, C., see Bakker, R. . . . 507 (2003) 210
Palumbo, L., see Alesini, D. . . . 507 (2003) 345
Palumbo, L., see Alesini, D. . . . 507 (2003) 502
Pangon, G., see Bocchetta, C.J. . . . 507 (2003) 484
Pastor, C., see Simon, E. . . . 507 (2003) 643
Pekeler, M., see Janssen, D. . . . 507 (2003) 314
Pellegrini, C., see Murokh, A. . . . 507 (2003) 417
Pellegrini, C., see Reiche, S. . . . 507 (2003) 426
Pellegrini, C., see Tremaine, A. . . . 507 (2003) 445
Pellegrino, L., see Alesini, D. . . . 507 (2003) 345
Pellegrino, L., see Alesini, D. . . . 507 (2003) 502
Perfetti, P., see Alesini, D. . . . 507 (2003) 345
Perfetti, P., see Alesini, D. . . . 507 (2003) 502
Peshekhonov, V., see Akesson, T. . . . 507 (2003) 622
Peskov, N.Yu., see Arzhannikov, A.V. . . . 507 (2003) 129
Peskov, N.Yu., see Savilov, A.V. . . . 507 (2003) 158
Peskov, N.Yu., see Savilov, A.V. . . . 507 (2003) 162
Petichakis, C., R.A. Stuart, C.C. Wright, A.I. Al-Shamma'a and J. Lucas, The dispersion relation for a cylindrical Cherenkov free electron maser . . . 507 (2003) 256
Petra, M., P.K. Den Hartog, E.R. Moog, S. Sasaki, N. Sereno and I.B. Vasserman, Radiation effects studies at the Advanced Photon Source . . . 507 (2003) 422
Petrarca, G.S., see Alesini, D. . . . 507 (2003) 345
Petrarca, G.S., see Alesini, D. . . . 507 (2003) 502
Petrillo, V., see Alesini, D. . . . 507 (2003) 345
Petrillo, V., see Alesini, D. . . . 507 (2003) 502
Petrossyan, B., see Bakker, R. . . . 507 (2003) 210
Petrov, A.K., see Nomaru, K. . . . 507 (2003) 552
Petrov, P.V., see Arzhannikov, A.V. . . . 507 (2003) 129
Petrov, V., see Janssen, D. . . . 507 (2003) 314
Pfeifer, M., see Juha, L. . . . 507 (2003) 577
Pflüger, J., B. Faatz, M. Tischer and T. Vielitz, Radiation exposure and magnetic performance of the undulator system for the VUV FEL at the TESLA Test Facility Phase-1 after 3 years of operation . . . 507 (2003) 186
Pflüger, J., see Ayvazyan, V. . . . 507 (2003) 368
Pflüger, J., U. Hahn, B. Faatz and M. Tischer, Undulator system for the VUV FEL at the TESLA test facility phase-2 . . . 507 (2003) 228
Pflüger, J., see Brefeld, W. . . . 507 (2003) 431
Picardi, L., see Alesini, D. . . . 507 (2003) 345
Picardi, L., see Alesini, D. . . . 507 (2003) 502
Piepke, A., see Djurcic, Z. . . . 507 (2003) 680
Pierini, P., see Alesini, D. . . . 507 (2003) 502
Pifferi, A., see Alesini, D. . . . 507 (2003) 345
Pifferi, A., see Alesini, D. . . . 507 (2003) 502
Pina, L., see Juha, L. . . . 507 (2003) 577
Piot, P., see Ayvazyan, V. . . . 507 (2003) 368
Piot, P., see Bakker, R. . . . 507 (2003) 210
Piot, Ph., see Faatz, B. . . . 507 (2003) 350
Piot, Ph., see Gerth, Ch. . . . 507 (2003) 335
Pirro, G.D., see Alesini, D. . . . 507 (2003) 502
Plucinski, L., see Ayvazyan, V. . . . 507 (2003) 368
Plucinski, L., see Gerth, Ch. . . . 507 (2003) 335
Poole, M.W. and B.W.J. Mc Neil, FEL options for the proposed UK fourth generation light source (4GLS). . . . 507 (2003) 489
Popik, V.M., see Koike, H. . . . 507 (2003) 242
Prati, P., see Formicola, A. . . . 507 (2003) 609
Prazeres, R., see Maître, P. . . . 507 (2003) 541
Prazeres, R., see Sauvage, S. . . . 507 (2003) 569
Preger, M., see Alesini, D. . . . 507 (2003) 345

Preger, M., see Alesini, D. . . . 507 (2003) 502
Price, M., see Akesson, T. . . . 507 (2003) 622
Prosperi, T., see Alesini, D. . . . 507 (2003) 345
Prosperi, T., see Alesini, D. . . . 507 (2003) 502

Quaresima, C., see Alesini, D. . . . 507 (2003) 345
Quaresima, C., see Alesini, D. . . . 507 (2003) 502
Quast, T., see Janssen, D. . . . 507 (2003) 314
Quattromini, M., see Alesini, D. . . . 507 (2003) 345
Quattromini, M., see Alesini, D. . . . 507 (2003) 502
Quimby, D.C., see Gottschalk, S.C. . . . 507 (2003) 181

Rago, C., see Bentson, L. . . . 507 (2003) 205
Raimondi, P., see Alesini, D. . . . 507 (2003) 345
Raimondi, P., see Alesini, D. . . . 507 (2003) 502
Rakowsky, G., see DiMauro, L. . . . 507 (2003) 15
Rakowsky, G., see Doyuran, A. . . . 507 (2003) 392
Rakowsky, G., see Murokh, A. . . . 507 (2003) 417
Rathke, J., see Bluem, H. . . . 507 (2003) 215
Redlich, B., L. van der Meer, H. Zacharias, G. Meijer and G. von Helden, FEL induced dynamics of small molecules on surfaces: N_2O on NaCl(1 0 0) . . . 507 (2003) 556
Redlin, H., see Bakker, R. . . . 507 (2003) 210
Rehlich, K., see Ayvazyan, V. . . . 507 (2003) 368
Reiche, S., P. Emma and C. Pellegrini, Pulse length control in an X-ray FEL by using wakefields . . . 507 (2003) 426
Reiche, S., see Murokh, A. . . . 507 (2003) 417
Reiche, S., see Tremaine, A. . . . 507 (2003) 445
Rembser, C., see Akesson, T. . . . 507 (2003) 622
Renieri, A., see Alesini, D. . . . 507 (2003) 345
Renieri, A., see Alesini, D. . . . 507 (2003) 502
Renieri, A., see Dattoli, G. . . . 507 (2003) 464
Renieri, A., SPARC project and SPARX proposal . . . 507 (2003) 507
Reppe, B., see Janssen, D. . . . 507 (2003) 314
Ricci, R., see Alesini, D. . . . 507 (2003) 345
Ricci, R., see Alesini, D. . . . 507 (2003) 502
Richter, A., see Asgekar, V. . . . 507 (2003) 224
Rifkin, J., see Bentson, L. . . . 507 (2003) 205
Rifkin, J., see Bolton, P.R. . . . 507 (2003) 220
Rippon, C., R. Bartolini, G. Dattoli, L. Giannessi, M.E. Couprie and D. Garzella, Self-consistent harmonic generation in storage ring FELs . . . 507 (2003) 299
Rippon, C., see Bruni, C. . . . 507 (2003) 285
Ristau, D., see De Ninno, G. . . . 507 (2003) 274
Roca, V., see Formicola, A. . . . 507 (2003) 609
Rocca, J.J., J. Filevich, E.C. Hammarsten, E. Jankowska, B. Benware, M.C. Marconi, B. Luther, A. Vinogradov, I. Artiukov, S. Moon and V.N. Shlyaptsev, Extremely compact soft X-ray lasers based on capillary discharges 507 (2003) 515
Rolfs, C., see Formicola, A. . . . 507 (2003) 609
Romaniouk, A., see Akesson, T. . . . 507 (2003) 622
Romano, M., see Formicola, A. . . . 507 (2003) 609
Rome', M., see Alesini, D. . . . 507 (2003) 345
Ronsivalle, C., see Alesini, D. . . . 507 (2003) 345
Ronsivalle, C., see Alesini, D. . . . 507 (2003) 502
Rose, J., see DiMauro, L. . . . 507 (2003) 15
Rose, J., see Doyuran, A. . . . 507 (2003) 392
Rosenzweig, J., see Murokh, A. . . . 507 (2003) 417
Rosenzweig, J., see Tremaine, A. . . . 507 (2003) 445
Rossbach, J., Demonstration of gain saturation and controlled variation of pulse length at the TESLA test facility FEL . . . 507 (2003) 362

Rossbach, J., see Ayvazyan, V. 507 (2003) 368
Roßbach, J., see Bakker, R. 507 (2003) 210
Rozental, R.M., see Ginzburg, N.S. 507 (2003) 61
Ruland, R., see Murokh, A. 507 (2003) 417
Rule, D.W., see Lumpkin, A.H. 507 (2003) 200
Rullier, J.L., see Donohue, J.T. 507 (2003) 56
Russell, S.J., Overview of high-brightness, high-average-current photoinjectors for FELs 507 (2003) 304
Rust, D.R., see Akesson, T. 507 (2003) 622
Ryc, L., see Juha, L. 507 (2003) 577

Sajaev, V. and Z. Huang, Spectral measurements of the second harmonic of the SASE FEL radiation at APS . 507 (2003) 154
Sajaev, V., see Li, Y. 507 (2003) 413
Sajaev, V., see Lumpkin, A.H. 507 (2003) 200
Sajaev, V., see Lumpkin, A.H. 507 (2003) 246
Sakaguchi, H., see Kamiya, J. 507 (2003) 703
Sakai, T., see Hayakawa, Y. 507 (2003) 404
Sakai, T., see Yokoyama, K. 507 (2003) 357
Sakamoto, N., see Kamiya, J. 507 (2003) 703
Sakemi, Y., see Kamiya, J. 507 (2003) 703
Saldin, E., see Ischebeck, R. 507 (2003) 175
Saldin, E.L., E.A. Schneidmiller and M.V. Yurkov, Coherence properties of the radiation from SASE FEL. . . 507 (2003) 106
Saldin, E.L., E.A. Schneidmiller and M.V. Yurkov, Scheme for attophysics experiments at a X-ray SASE FEL 507 (2003) 439
Saldin, E.L., E.A. Schneidmiller and M.V. Yurkov, Statistical properties of radiation from SASE FEL driven by short electron bunches 507 (2003) 101
Saldin, E.L., see Ayvazyan, V. 507 (2003) 368
Saldin, E.L., see Brefeld, W. 507 (2003) 431
Saldin, E.L., see Faatz, B. 507 (2003) 350
Saldin, E.L., see Feldhaus, J. 507 (2003) 435
Saldin, E.L., see Feldhaus, J. 507 (2003) 510
Sandner, W., see Bakker, R. 507 (2003) 210
Sandner, W., see Janssen, D. 507 (2003) 314
Sanelli, C., see Alesini, D. 507 (2003) 345
Sanelli, C., see Alesini, D. 507 (2003) 502
Sapinski, M., see Akesson, T. 507 (2003) 622
Sasaki, S., see Petra, M. 507 (2003) 422
Sasaki, S., see Vasserman, I.B. 507 (2003) 191
Sato, I., see Hayakawa, Y. 507 (2003) 404
Sato, I., see Yokoyama, K. 507 (2003) 357
Sauvage, S., P. Boucaud, T. Brunhes, F. Bras, G. Fishman, F. Glotin, R. Prazeres, J.M. Ortega, J.-M. Gérard, M. Broquier, C. Crépin and R.P.S.M. Lobo, Non-linear infrared properties of InAs/GaAs self-assembled quantum dots 507 (2003) 569
Savilov, A.V., I.V. Bandurkin and N.Yu. Peskov, Regime of non-resonant trapping in an FEM-amplifier 507 (2003) 158
Savilov, A.V., N.Yu. Peskov and A.K. Kaminsky, Submillimeter moderately relativistic free-electron maser 507 (2003) 162
Sawamura, M., see Hajima, R. 507 (2003) 115
Schaerf, C., see Alesini, D. 507 (2003) 345
Schaerf, C., see Alesini, D. 507 (2003) 502
Schamlott, A., see Janssen, D. 507 (2003) 314
Schegelsky, V., see Akesson, T. 507 (2003) 622
Schlarb, H., see Ayvazyan, V. 507 (2003) 368
Schlarb, H., see Faatz, B. 507 (2003) 350
Schmerge, J.F., see Dowell, D.H. 507 (2003) 327
Schmerge, J.F., see Dowell, D.H. 507 (2003) 331
Schmüser, P., see Ischebeck, R. 507 (2003) 175
Schneider, Ch., see Janssen, D. 507 (2003) 314
Schneidmiller, E., see Ischebeck, R. 507 (2003) 175
Schneidmiller, E.A., see Ayvazyan, V. 507 (2003) 368

Schneidmiller, E.A., see Brefeld, W. . . . 507 (2003) 431
Schneidmiller, E.A., see Faatz, B. . . . 507 (2003) 350
Schneidmiller, E.A., see Feldhaus, J. . . . 507 (2003) 435
Schneidmiller, E.A., see Feldhaus, J. . . . 507 (2003) 510
Schneidmiller, E.A., see Saldin, E.L. . . . 507 (2003) 101
Schneidmiller, E.A., see Saldin, E.L. . . . 507 (2003) 106
Schneidmiller, E.A., see Saldin, E.L. . . . 507 (2003) 439
Scholz, M., see Juha, L. . . . 507 (2003) 577
Schreiber, S., see Ayvazyan, V. . . . 507 (2003) 368
Schreiber, S., see Bakker, R. . . . 507 (2003) 210
Schreiber, S., see Brefeld, W. . . . 507 (2003) 431
Schreiber, S., see Faatz, B. . . . 507 (2003) 350
Schreiber, S., see Gerth, Ch. . . . 507 (2003) 335
Schroeder, C.B., W.M. Fawley and E. Esarey, Statistical properties of radiation power levels from a high-gain free-electron laser at and beyond saturation . . . 507 (2003) 110
Schultheiss, T., see Bluem, H. . . . 507 (2003) 215
Schulz, J., H. Wabnitz, T. Laarmann, P. Gürtler, W. Laasch, A. Swiderski, Th. Möller and A.R.B. de Castro, Energy absorption of free rare gas clusters irradiated by intense VUV pulses of a free electron laser . . . 507 (2003) 572
Schumann, R., see Bakker, R. . . . 507 (2003) 210
Schurig, R., see Janssen, D. . . . 507 (2003) 314
Schürmann, D., see Formicola, A. . . . 507 (2003) 609
Sedrakian, Kh.V., see Avetissian, H.K. . . . 507 (2003) 582
Serafini, L., see Alesini, D. . . . 507 (2003) 345
Serafini, L., see Alesini, D. . . . 507 (2003) 502
Sereno, N., see Petra, M. . . . 507 (2003) 422
Sergeev, A.S., see Arzhannikov, A.V. . . . 507 (2003) 129
Sergeev, A.S., see Ginzburg, N.S. . . . 507 (2003) 61
Serio, M., see Alesini, D. . . . 507 (2003) 345
Serio, M., see Alesini, D. . . . 507 (2003) 502
Sertore, D., see Alesini, D. . . . 507 (2003) 502
Sertore, D., see Bakker, R. . . . 507 (2003) 210
Sertore, D., see Faatz, B. . . . 507 (2003) 350
Setzer, S., see Bakker, R. . . . 507 (2003) 210
Sgamma, F., see Alesini, D. . . . 507 (2003) 345
Sgamma, F., see Alesini, D. . . . 507 (2003) 502
Shaftan, T., see DiMauro, L. . . . 507 (2003) 15
Shaftan, T., see Dowell, D.H. . . . 507 (2003) 331
Shaftan, T., see Doyuran, A. . . . 507 (2003) 392
Sheehy, B., see DiMauro, L. . . . 507 (2003) 15
Sheehy, B., see Doyuran, A. . . . 507 (2003) 392
Sheehy, B., see Neumann, J.G. . . . 507 (2003) 498
Shepherd, R., see Kuba, J. . . . 507 (2003) 475
Shevchenko, O.A. and N.A. Vinokurov, Correlation function equation for the SASE FEL . . . 507 (2003) 84
Shevchenko, O.A., see Mikhailov, S.F. . . . 507 (2003) 294
Shimbara, Y., see Kamiya, J. . . . 507 (2003) 703
Shimizu, Y., see Kamiya, J. . . . 507 (2003) 703
Shimomura, K., see Tanaka, H. . . . 507 (2003) 657
Shinn, M., see Austin, R.H. . . . 507 (2003) 561
Shinn, M., see Neil, G.R. . . . 507 (2003) 537
Shinn, M.D., G.R. Baker, C.P. Behre, S.V. Benson, M.E. Bevins, L.A. Dillon-Townes, H.F. Dylla, E.J. Feldl, J.F. Gubeli, R.D. Lassiter, F.D. Martin and G.R. Neil, Design of the Jefferson Lab IR Upgrade FEL optical cavity . . . 507 (2003) 196
Shintake, T., Real-time animation of synchrotron radiation . . . 507 (2003) 89
Shintake, T., T. Tanaka, T. Hara, K. Togawa, T. Inagaki, Y.J. Kim, T. Ishikawa, H. Kitamura, H. Baba, H. Matsumoto, S. Takeda, M. Yoshida and Y. Takasu, Status of SPring-8 compact SASE source FEL project 507 (2003) 382
Shirasaka, H., see Ginzburg, N.S. . . . 507 (2003) 61
Shizuma, T., see Hajima, R. . . . 507 (2003) 115

Shlyaptsev, V.N., see Kuba, J. 507 (2003) 475
Shlyaptsev, V.N., see Rocca, J.J. 507 (2003) 515
Shmeleva, A., see Akesson, T. 507 (2003) 622
Simon, A., see Maître, P. 507 (2003) 541
Simon, E., L. Bergé, A. Broniatowski, R. Bouvier, B. Chambon, M. De Jésus, D. Drain, L. Dumoulin, J. Gascon, J.-P. Hadjout, A. Juillard, O. Martineau, C. Pastor, M. Stern and L. Vagneron, SICANE: a detector array for the measurement of nuclear recoil quenching factors using a monoenergetic neutron beam 507 (2003) 643
Sinitsky, S.L., see Arzhannikov, A.V. 507 (2003) 129
Skaritka, J., see DiMauro, L. 507 (2003) 15
Skaritka, J., see Doyuran, A. 507 (2003) 392
Skaritka, J., see Murokh, A. 507 (2003) 417
Skaritka, J., see Tremaine, A. 507 (2003) 445
Smaluk, V., see Bocchetta, C.J. 507 (2003) 484
Smirnov, S., see Akesson, T. 507 (2003) 622
Smirnova, L.N., see Akesson, T. 507 (2003) 622
Smith, R.F., see Kuba, J. 507 (2003) 475
Sobajima, M., see Koike, H. 507 (2003) 242
Sobajima, M., see Yokoyama, M. 507 (2003) 261
Sobierajski, R., see Ayvazyan, V. 507 (2003) 368
Sobierajski, R., see Juha, L. 507 (2003) 577
Sobotka, L.G., see Vićić, M. 507 (2003) 636
Sofronov, P.F., see Baryshevsky, V.G. 507 (2003) 137
Sosnovtsev, V., see Akesson, T. 507 (2003) 622
Soutchkov, S., see Akesson, T. 507 (2003) 622
Spataro, B., see Alesini, D. 507 (2003) 345
Spataro, B., see Alesini, D. 507 (2003) 502
Spencer, C.M., see Bentson, L. 507 (2003) 205
Spiridenkov, E., see Akesson, T. 507 (2003) 622
Stecchi, A., see Alesini, D. 507 (2003) 345
Stecchi, A., see Alesini, D. 507 (2003) 502
Steeg, B., see Ayvazyan, V. 507 (2003) 368
Steeg, B., see Ischebeck, R. 507 (2003) 175
Stefanutti, M., see Bocchetta, C.J. 507 (2003) 484
Stein, P.v., see Janssen, D. 507 (2003) 314
Stella, A., see Alesini, D. 507 (2003) 345
Stella, A., see Alesini, D. 507 (2003) 502
Stepanov, V.D., see Arzhannikov, A.V. 507 (2003) 129
Stephan, F., see Bakker, R. 507 (2003) 210
Stern, M., see Simon, E. 507 (2003) 643
Stolyarsky, V.I., see Baryshevsky, V.G. 507 (2003) 93
Stolyarsky, V.I., see Baryshevsky, V.G. 507 (2003) 137
Strieder, F., see Formicola, A. 507 (2003) 609
Stuart, R.A., see Petichakis, C. 507 (2003) 256
Stulle, F., see Ayvazyan, V. 507 (2003) 368
Suemine, S., see Kato, R. 507 (2003) 409
Suhua, Hu, see Zhiwen, Hu. 507 (2003) 617
Svandrlik, M., see Bocchetta, C.J. 507 (2003) 484
Swiderski, A., see Schulz, J. 507 (2003) 572
Swinney, R., see Djurcic, Z. 507 (2003) 680
Sytchev, K.P., see Ayvazyan, V. 507 (2003) 368
Sytchev, K.P., see Faatz, B. 507 (2003) 350

Takashima, Y., see Hosaka, M. 507 (2003) 289
Takasu, Y., see Shintake, T. 507 (2003) 382
Takeda, S., see Shintake, T. 507 (2003) 382
Talnagi, J., see Liu, H. 507 (2003) 691

Tanaka, H., K. Nagamine, N. Kawamura, S.N. Nakamura, K. Ishida and K. Shimomura, Development of a two-fold segmented detection system for near horizontally cosmic-ray muons to probe the internal structure of a volcano . . . 507 (2003) 657
Tanaka, T., see Hayakawa, Y. . . . 507 (2003) 404
Tanaka, T., see Kitamura, M. . . . 507 (2003) 670
Tanaka, T., see Shintake, T. . . . 507 (2003) 382
Tanaka, T., see Yokoyama, K. . . . 507 (2003) 357
Tani, M., see Neil, G.R. . . . 507 (2003) 537
Tazzioli, F., see Alesini, D. . . . 507 (2003) 345
Tazzioli, F., see Alesini, D. . . . 507 (2003) 502
Teichert, J., A. Büchner, P. Evtushenko, F. Gabriel, U. Lehnert, P. Michel and J. Voigtländer, Results of beam parameter measurement of the ELBE electron accelerator after commissioning . . . 507 (2003) 354
Teichert, J., see Janssen, D. . . . 507 (2003) 314
Terashima, S., see Kamiya, J. . . . 507 (2003) 703
Terrasi, F., see Formicola, A. . . . 507 (2003) 609
Thomas, C.A., J.I.M. Botman, C. Bruni, D. Garzella, M.E. Couprie, G. De Ninno and G. Dattoli, Longitudinal detuning for an SRFEL . . . 507 (2003) 281
Tiedtke, K., see Ayvazyan, V. . . . 507 (2003) 368
Tiedtke, K., see Ischebeck, R. . . . 507 (2003) 175
Tikhomirov, V., see Akesson, T. . . . 507 (2003) 622
Tipton, B., see Djurcic, Z. . . . 507 (2003) 680
Tischer, M., see Pflüger, J. . . . 507 (2003) 186
Tischer, M., see Pflüger, J. . . . 507 (2003) 228
Todd, A.M.M., see Bluem, H. . . . 507 (2003) 215
Togawa, K., see Shintake, T. . . . 507 (2003) 382
Tometaka, I., see Kii, T. . . . 507 (2003) 340
Tometaka, I., see Ohgaki, H. . . . 507 (2003) 150
Tonutti, M., see Ischebeck, R. . . . 507 (2003) 175
Toor, A., see Murokh, A. . . . 507 (2003) 417
Tosi, L., see Bocchetta, C.J. . . . 507 (2003) 484
Toyoda, K., see Koike, H. . . . 507 (2003) 242
Trakhtenberg, E.M., see Vasserman, I.B. . . . 507 (2003) 191
Trautvetter, H.-P., see Formicola, A. . . . 507 (2003) 609
Tremaine, A., see Murokh, A. . . . 507 (2003) 417
Tremaine, A., X.J. Wang, M. Babzien, I. Ben-Zvi, M. Cornacchia, R. Malone, A. Murokh, H.-D. Nuhn, C. Pellegrini, S. Reiche, J. Rosenzweig, J. Skaritka and V. Yakimenko, Measurements of nonlinear harmonic radiation and harmonic microbunching in a visible SASE FEL . . . 507 (2003) 445
Treusch, R., see Ayvazyan, V. . . . 507 (2003) 368
Treusch, R., see Ischebeck, R. . . . 507 (2003) 175
Tribendis, A., see Janssen, D. . . . 507 (2003) 314
Tromba, G., see Bocchetta, C.J. . . . 507 (2003) 484
Trovò, M., see De Ninno, G. . . . 507 (2003) 274
Tsakov, I., see Bakker, R. . . . 507 (2003) 210
Tsuchiya, K., see Isoyama, G. . . . 507 (2003) 234
Tsunawaki, Y., N. Ohigashi, M. Asakawa, K. Imasaki and K. Mima, Magnetic field analysis of hybrid helical wiggler with multiple poles per period . . . 507 (2003) 166
Tsunawaki, Y., see Nishiyama, H. . . . 507 (2003) 74
Tsunawaki, Y., see Ohigashi, N. . . . 507 (2003) 250

Uchida, M., see Kamiya, J. . . . 507 (2003) 703
Ullschmied, J., see Juha, L. . . . 507 (2003) 577

Vaccarezza, C., see Alesini, D. . . . 507 (2003) 345
Vaccarezza, C., see Alesini, D. . . . 507 (2003) 502
Vagneron, L., see Simon, E. . . . 507 (2003) 643
VanBerg, R., see Akesson, T. . . . 507 (2003) 622
van Bibber, K., see Murokh, A. . . . 507 (2003) 417
van der Geer, C.A.J., see de Loos, M.J. . . . 507 (2003) 97

van der Geer, S.B., see de Loos, M.J. 507 (2003) 97
van der Meer, A.F.G., see Asgekar, V. 507 (2003) 224
van der Meer, A.F.G., see de Loos, M.J. 507 (2003) 97
van der Meer, A.F.G., see Militsyn, B.L. 507 (2003) 494
van der Meer, L., see Austin, R.H. 507 (2003) 561
van der Meer, L., see Redlich, B. 507 (2003) 556
Vascotto, A., see Bocchetta, C.J. 507 (2003) 484
Vasserman, I.B., S. Sasaki, R.J. Dejus, O.A. Makarov, E.R. Moog, E.M. Trakhtenberg and N.A. Vinokurov, Magnetic measurements and tuning of the LCLS prototype undulator 507 (2003) 191
Vasserman, I.B., see Petra, M. 507 (2003) 422
Vassilakopoulos, V., see Akesson, T. 507 (2003) 622
Vescovi, M., see Alesini, D. 507 (2003) 345
Vescovi, M., see Alesini, D. 507 (2003) 502
Vicario, C., see Alesini, D. 507 (2003) 345
Vicario, C., see Alesini, D. 507 (2003) 502
Vićić, M., L.G. Sobotka, J.F. Williamson, R.J. Charity and J.M. Elson, Fast pulsed UV light source and calibration of non-linear photomultiplier response 507 (2003) 636
Vielitz, T., see Pflüger, J. 507 (2003) 186
Vinogradov, A., see Rocca, J.J. 507 (2003) 515
Vinokurov, N.A., see Mikhailov, S.F. 507 (2003) 294
Vinokurov, N.A., see Shevchenko, O.A. 507 (2003) 84
Vinokurov, N.A., see Vasserman, I.B. 507 (2003) 191
Visintini, R., see Bocchetta, C.J. 507 (2003) 484
Vobly, P.D., see Mikhailov, S.F. 507 (2003) 294
Voigtländer, J., see Teichert, J. 507 (2003) 354
Volkov, V., see Janssen, D. 507 (2003) 314
Volpini, G., see Alesini, D. 507 (2003) 502
von Helden, G., see Militsyn, B.L. 507 (2003) 494
von Helden, G., see Redlich, B. 507 (2003) 556
Vorlíček, V., see Juha, L. 507 (2003) 577

Wabnitz, H., see Schulz, J. 507 (2003) 572
Wakasa, T., see Kamiya, J. 507 (2003) 703
Walker, R.P., see Bocchetta, C.J. 507 (2003) 484
Walker, R.P., see De Ninno, G. 507 (2003) 274
Wallen, E., see Eriksson, M. 507 (2003) 470
Wang, C., see Akesson, T. 507 (2003) 622
Wang, X., see Murokh, A. 507 (2003) 417
Wang, X.J. and X.Y. Chang, Femto-seconds kilo-ampere electron beam generation 507 (2003) 310
Wang, X.J., see DiMauro, L. 507 (2003) 15
Wang, X.J., see Doyuran, A. 507 (2003) 392
Wang, X.J., see Tremaine, A. 507 (2003) 445
Weiland, T., see Bakker, R. 507 (2003) 210
Weise, H., see Ayvazyan, V. 507 (2003) 368
Wendt, M., see Ayvazyan, V. 507 (2003) 368
Werin, S., see Eriksson, M. 507 (2003) 470
Will, I., see Bakker, R. 507 (2003) 210
Will, I., see Gerth, Ch. 507 (2003) 335
Will, I., see Janssen, D. 507 (2003) 314
Williams, G.P., see Neil, G.R. 507 (2003) 537
Williams, H.H., see Akesson, T. 507 (2003) 622
Williamson, J.F., see Vićić, M. 507 (2003) 636
Wootton, A., see Kuba, J. 507 (2003) 475
Wright, C.C., see Petichakis, C. 507 (2003) 256
Wu, J., see Yu, L.H. 507 (2003) 455
Wu, J.H., see Bocchetta, C.J. 507 (2003) 484
Wünsch, R., see de Loos, M.J. 507 (2003) 97

Xie, A., see Austin, R.H. 507 (2003) 561
Xie, M., High gain free electron lasers driven by flat electron beam 507 (2003) 450

Yakimenko, V., see Murokh, A. 507 (2003) 417
Yakimenko, V., see Tremaine, A. 507 (2003) 445
Yamamoto, S., see Isoyama, G. 507 (2003) 234
Yamane, K., see Kii, T. 507 (2003) 340
Yamane, K., see Ohgaki, H. 507 (2003) 150
Yamazaki, J., see Hosaka, M. 507 (2003) 289
Yamazaki, T., see Kii, T. 507 (2003) 340
Yamazaki, T., see Masuda, K. 507 (2003) 133
Yamazaki, T., see Ohgaki, H. 507 (2003) 150
Yang, B.X., see Lumpkin, A.H. 507 (2003) 200
Yang, B.X., see Lumpkin, A.H. 507 (2003) 246
Yasuda, Y., see Kamiya, J. 507 (2003) 703
Yokoyama, K., I. Sato, K. Hayakawa, T. Tanaka, Y. Hayakawa, K. Kanno, T. Sakai, K. Ishiwata and E. Hashimoto, Stability of the LEBRA infrared FEL 507 (2003) 357
Yokoyama, K., see Hayakawa, Y. 507 (2003) 404
Yokoyama, M., F. Oda, K. Nomaru, H. Koike, M. Sobajima, M. Kawai, H. Kuroda and K. Nakai, Improvement of KHI FEL device at FEL-SUT 507 (2003) 261
Yokoyama, M., see Koike, H. 507 (2003) 242
Yoo, J., see Jeong, Y.U. 507 (2003) 125
Yoshida, H.P., see Kamiya, J. 507 (2003) 703
Yoshida, M., see Shintake, T. 507 (2003) 382
Yoshikawa, H., see Kitamura, M. 507 (2003) 670
Yoshikawa, K., see Kii, T. 507 (2003) 340
Yoshikawa, K., see Masuda, K. 507 (2003) 133
Yoshikawa, K., see Ohgaki, H. 507 (2003) 150
Yosoi, M., see Kamiya, J. 507 (2003) 703
Yu, L.H. and J. Wu, Simulations for the FERMI@ELETTRA proposal to generate 40- and 10-nm coherent radiation using the HGHG scheme 507 (2003) 455
Yu, L.H., see Bocchetta, C.J. 507 (2003) 484
Yu, L.H., see DiMauro, L. 507 (2003) 15
Yu, L.H., see Doyuran, A. 507 (2003) 392
Yurkov, M., see Ischebeck, R. 507 (2003) 175
Yurkov, M.V., see Ayvazyan, V. 507 (2003) 368
Yurkov, M.V., see Brefeld, W. 507 (2003) 431
Yurkov, M.V., see Faatz, B. 507 (2003) 350
Yurkov, M.V., see Feldhaus, J. 507 (2003) 435
Yurkov, M.V., see Feldhaus, J. 507 (2003) 510
Yurkov, M.V., see Saldin, E.L. 507 (2003) 101
Yurkov, M.V., see Saldin, E.L. 507 (2003) 106
Yurkov, M.V., see Saldin, E.L. 507 (2003) 439

Zacharias, H., see Redlich, B. 507 (2003) 556
Zavatarelli, S., see Formicola, A. 507 (2003) 609
Zema, N., see Alesini, D. 507 (2003) 345
Zema, N., see Alesini, D. 507 (2003) 502
Zengliang, Yu, see Zhiwen, Hu 507 (2003) 617
Zhang, X.-C., see Neil, G.R. 507 (2003) 537
Zhang, Y., Y. Derbenev and R. Li, Image charge undulator 507 (2003) 459
Zhiwen, Hu, Yu Zengliang, Wu Lijun, Hu Suhua and Xu An, An optimization control program for the ASIPP microbeam 507 (2003) 617
Zobov, M., see Alesini, D. 507 (2003) 345
Zobov, M., see Alesini, D. 507 (2003) 502
Zotova, I.V., see Ginzburg, N.S. 507 (2003) 61

ELSEVIER

Available online at www.sciencedirect.com

SCIENCE DIRECT®

Nuclear Instruments and Methods in Physics Research A 507 (2003) 737–745

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH Section A

www.elsevier.com/locate/nima

Subject Index

FEL 2002
Proceedings of the 24th Free Electron Laser Conference
and 9th FEL Users Workshop
Argonne, IL, USA, September 9–13, 2002

Editors: K.-J. Kim, S.V. Milton, E. Gluskin

Section 1. FEL Prize and New Lasing

Chaos studies on the super-ACO free electron laser, M.E. Couprie 507 (2003) 1

Two-color experiments with infrared lasers, J.M. Ortega 507 (2003) 8

First SASE and seeded FEL lasing of the NSLS DUV FEL at 266 and 400 nm, L. DiMauro, A. Doyuran, W. Graves, R. Heese, E.D. Johnson, S. Krinsky, H. Loos, J.B. Murphy, G. Rakowsky, J. Rose, T. Shaftan, B. Sheehy, J. Skaritka, X.J. Wang and L.H. Yu 507 (2003) 15

Section 2. FEL Theory

Some issues and subtleties in numerical simulation of X-ray FELs, W.M. Fawley 507 (2003) 19

MOPA optical klystron FELs and coherent harmonic generation, G. Dattoli, L. Giannessi and P.L. Ottaviani 507 (2003) 26

High-gain FEL on the coherent Bremsstrahlung of a relativistic electron beam in a crystal, H.K. Avetissian, A.L. Khachatryan and G.F. Mkrtchian 507 (2003) 31

Use of dynamical undulator mechanism to produce short wavelength radiation in volume FEL (VFEL), V.G. Baryshevsky and K.G. Batrakov 507 (2003) 35

Operation of an optical klystron with small dispersion, S. Benson 507 (2003) 40

Simulations of high-power free electron lasers with strongly focused electron and optical beams, J. Blau, V. Bouras, A. Kalfoutzos, G. Allgaier, T. Fontana, P.P. Crooker and W.B. Colson 507 (2003) 44

The free electron laser interaction with a short-Rayleigh-length optical mode, W.B. Colson, J. Blau and R.L. Armstead 507 (2003) 48

A study of the stability of a high-power free electron laser utilizing a short Rayleigh length, P.P. Crooker, T. Campbell, W. Ossenfort, S. Miller, J. Blau and W. Colson 507 (2003) 52

Electron trajectories in a helical free-electron laser with or without an axial guide field, J.T. Donohue and J.L. Rullier 507 (2003) 56

doi:10.1016/S0168-9002(03)01938-7

Increasing superradiant pulse peak power by using electron energy chirp, N.S. Ginzburg, I.V. Zotova, R.M. Rozental, A.S. Sergeev, M. Kamada, K. Kurihara, H. Shirasaka, R. Ando and K. Kamada 507 (2003) 61

Spontaneous and amplified radiation at the initial stage of a SASE FEL, Z. Huang and K.-J. Kim. 507 (2003) 65

Chaotic behaviour in a realizable helical-wiggler field, S.-K. Nam and K.-B. Kim 507 (2003) 69

Dynamics of low coupling parameter free-electron laser oscillator, H. Nishiyama, M. Asakawa, Y. Tsunawaki, M. Heya, K. Awazu and K. Imasaki. 507 (2003) 74

Formation of an FEL field with uniform and constant phase due to the slippage effect, N. Nishimori, R. Hajima, R. Nagai and E.J. Minehara. 507 (2003) 79

Correlation function equation for the SASE FEL, O.A. Shevchenko and N.A. Vinokurov 507 (2003) 84

Real-time animation of synchrotron radiation, T. Shintake 507 (2003) 89

Application of volume diffraction grating for TeraHertz lasing in volume FEL (VFEL), V.G. Baryshevsky, K.G. Batrakov and V.I. Stolyarsky 507 (2003) 93

A 3D particle tracking technique for FEL start-up and saturation effects, M.J. de Loos, C.A.J. van der Geer, S.B. van der Geer, A.F.G. van der Meer, D. Oepts and R. Wünsch 507 (2003) 97

Statistical properties of radiation from SASE FEL driven by short electron bunches, E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov 507 (2003) 101

Coherence properties of the radiation from SASE FEL, E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov . . . 507 (2003) 106

Statistical properties of radiation power levels from a high-gain free-electron laser at and beyond saturation, C.B. Schroeder, W.M. Fawley and E. Esarey 507 (2003) 110

Section 3. High-Power, Long-Wavelength FELs

First demonstration of energy-recovery operation in the JAERI superconducting linac for a high-power free-electron laser, R. Hajima, T. Shizuma, M. Sawamura, R. Nagai, N. Nishimori, N. Kikuzawa and E.J. Minehara 507 (2003) 115

Possibility of a high-power, high-gain FEL amplifier, D.C. Nguyen and H.P. Freund. 507 (2003) 120

Upgrade of a compact FIR FEL driven by a magnetron-based microtron for the wavelength range of 100–300 μm, Y.U. Jeong, G.M. Kazakevitch, B.C. Lee, S.O. Cho, J. Yoo, N.G. Gavrilov and V.V. Kubarev. . . 507 (2003) 125

Four-channel planar FEM for high-power mm-wave generation (theoretical and experimental problems), A.V. Arzhannikov, V.T. Astrelin, V.B. Bobylev, N.S. Ginzburg, V.G. Ivanenko, P.V. Kalinin, S.A. Kuznetsov, N.Yu. Peskov, P.V. Petrov, A.S. Sergeev, S.L. Sinitsky and V.D. Stepanov 507 (2003) 129

A simulation study on energy recovery from spent electron beams in an S-band linac, K. Masuda, S. Matsumura, T. Kii, H. Ohgaki, T. Yamazaki, K. Nagasaki and K. Yoshikawa. 507 (2003) 133

Progress of the volume FEL (VFEL) experiments in millimeter range, V.G. Baryshevsky, K.G. Batrakov, A.A. Gurinovich, I.I. Ilienko, A.S. Lobko, P.V. Molchanov, V.I. Moroz, P.F. Sofronov and V.I. Stolyarsky . . . 507 (2003) 137

Electron beam dynamics through a return-arc and a deceleration path of the JAERI energy-recovery linac, R. Hajima and E.J. Minehara. 507 (2003) 141

Variable-energy microtron-injector for a compact wide-band FIR free electron laser, G.M. Kazakevitch, Y.U. Jeong, B.C. Lee, N.G. Gavrilov and M.N. Kondaurov. 507 (2003) 146

Design studies of IR-FEL system at IAE, Kyoto University, H. Ohgaki, I. Tometaka, K. Yamane, T. Kii, K. Masuda, K. Yoshikawa and T. Yamazaki 507 (2003) 150

Spectral measurements of the second harmonic of the SASE FEL radiation at APS, V. Sajaev and Z. Huang . 507 (2003) 154

Regime of non-resonant trapping in an FEM-amplifier, A.V. Savilov, I.V. Bandurkin and N.Yu. Peskov 507 (2003) 158

Submillimeter moderately relativistic free-electron maser, A.V. Savilov, N.Yu. Peskov and A.K. Kaminsky . . . 507 (2003) 162

Magnetic field analysis of hybrid helical wiggler with multiple poles per period, Y. Tsunawaki, N. Ohigashi, M. Asakawa, K. Imasaki and K. Mima 507 (2003) 166

Section 4. FEL Technologies

Mirrors issues for FELs, D. Garzella 507 (2003) 170

Study of the transverse coherence at the TTF free electron laser, R. Ischebeck, J. Feldhaus, Ch. Gerth, E. Saldin, P. Schmüser, E. Schneidmiller, B. Steeg, K. Tiedtke, M. Tonutti, R. Treusch and M. Yurkov 507 (2003) 175

Permanent magnet systems for free-electron lasers, S.C. Gottschalk, D.H. Dowell and D.C. Quimby. 507 (2003) 181

Radiation exposure and magnetic performance of the undulator system for the VUV FEL at the TESLA Test Facility Phase-1 after 3 years of operation, J. Pflüger, B. Faatz, M. Tischer and T. Vielitz. 507 (2003) 186

Magnetic measurements and tuning of the LCLS prototype undulator, I.B. Vasserman, S. Sasaki, R.J. Dejus, O.A. Makarov, E.R. Moog, E.M. Trakhtenberg and N.A. Vinokurov 507 (2003) 191

Design of the Jefferson Lab IR Upgrade FEL optical cavity, M.D. Shinn, G.R. Baker, C.P. Behre, S.V. Benson, M.E. Bevins, L.A. Dillon-Townes, H.F. Dylla, E.J. Feldl, J.F. Gubeli, R.D. Lassiter, F.D. Martin and G.R. Neil 507 (2003) 196

Evidence for transverse dependencies in COTR and microbunching in a SASE FEL, A.H. Lumpkin, Y.C. Chae, J.W. Lewellen, W.J. Berg, M. Borland, S.G. Biedron, R.J. Dejus, M. Erdmann, Z. Huang, K.-J. Kim, Y. Li, S.V. Milton, E.R. Moog, D.W. Rule, V. Sajaev and B.X. Yang 507 (2003) 200

FEL research and development at the SLAC sub-picosecond photon source, SPPS, L. Bentson, P. Bolton, E. Bong, P. Emma, J. Galayda, J. Hastings, P. Krejcik, C. Rago, J. Rifkin and C.M. Spencer 507 (2003) 205

First beam measurements at the photo injector test facility at DESY Zeuthen, R. Bakker, M.v. Hartrott, E. Jaeschke, D. Krämer, J.P. Carneiro, K. Flöttmann, P. Piot, J. Roßbach, S. Schreiber, K. Abrahamyan, J. Bähr, I. Bohnet, V. Djordjadze, U. Gensch, H.J. Graboschi, Z. Li, D. Lipka, A. Oppelt, B. Petrossyan, F. Stephan, P. Michelato, C. Pagani, D. Sertore, V. Miltchev, I. Tsakov, A. Liero, H. Redlin, W. Sandner, R. Schumann, I. Will, R. Cee, M. Krassilnikov, S. Setzer and T. Weiland 507 (2003) 210

Recent advances in high-brightness electron guns at AES, H. Bluem, A.M.M. Todd, M.D. Cole, J. Rathke and T. Schultheiss 507 (2003) 215

Electro-optic sampling of single electron beam bunches of ultrashort duration, P.R. Bolton, J.E. Clendenin, D.H. Dowell, P. Krejcik and J. Rifkin. 507 (2003) 220

Investigation of short pulse effects in IR FELs and new simulation results, V. Asgekar, G. Berden, M. Brunken, L. Casper, H. Genz, M. Grigore, C. Heßler, S. Khodyachykh, A. Richter and A. F.G. van der Meer. 507 (2003) 224

Undulator system for the VUV FEL at the TESLA test facility phase-2, J. Pflüger, U. Hahn, B. Faatz and M. Tischer 507 (2003) 228

Proposal for the edge-focusing wiggler for SASE, G. Isoyama, M. Fujimoto, R. Kato, S. Yamamoto and K. Tsuchiya 507 (2003) 234

Advanced photocathode simulation and theory, K.L. Jensen, D.W. Feldman and P.G. O'Shea 507 (2003) 238

Design and study of FIR FEL device using S-band linac at FEL-SUT, H. Koike, M. Sobajima, V.M. Popik, M. Yokoyama, F. Oda, M. Kawai, K. Toyoda, H. Kuroda and K. Nakai 507 (2003) 242

Observations of z-dependent microbunching harmonic intensities using COTR in a SASE FEL, A.H. Lumpkin, S.G. Biedron, R.J. Dejus, W.J. Berg, M. Borland, Y.C. Chae, M. Erdmann, Z. Huang, K.-J. Kim, Y. Li, J.W. Lewellen, S.V. Milton, E. Moog, V. Sajaev and B.X. Yang 507 (2003) 246

Construction of compact FEM using solenoid-induced helical wiggler, N. Ohigashi, Y. Tsunawaki, M. Fujita, K. Imasaki, K. Mima and S. Nakai 507 (2003) 250

The dispersion relation for a cylindrical Cherenkov free electron maser, C. Petichakis, R.A. Stuart, C.C. Wright, A.I. Al-Shamma'a and J. Lucas 507 (2003) 256

Improvement of KHI FEL device at FEL-SUT, M. Yokoyama, F. Oda, K. Nomaru, H. Koike, M. Sobajima, M. Kawai, H. Kuroda and K. Nakai 507 (2003) 261

Section 5. Storage Ring FELs

New results and prospects for harmonic generation in storage ring FELs, V.N. Litvinenko 507 (2003) 265

The UV European FEL at ELETTRA: towards compatibility of storage ring operation for FEL and synchrotron radiation, G. De Ninno, M. Trovò, M. Danailov, M. Marsi, E. Karantzoulis, B. Diviacco, R.P. Walker, R. Bartolini, G. Dattoli, L. Giannessi, L. Mezi, M.E. Couprie, A. Gatto, N. Kaiser, S. Günster and D. Ristau 507 (2003) 274

Longitudinal detuning for an SRFEL, C.A. Thomas, J.I.M. Botman, C. Bruni, D. Garzella, M.E. Couprie, G. De Ninno and G. Dattoli 507 (2003) 281

Super-ACO FEL oscillation with longitudinal to transverse coupled beam dynamics, C. Bruni, G.L. Orlandi, D. Garzella, G. De Ninno, M.E. Couprie, R. Bartolini, C. Rippon and G. Dattoli 507 (2003) 285

Q-switching operation of the UVSOR-FEL, M. Hosaka, M. Katoh, A. Mochihashi, J. Yamazaki, K. Hayashi, Y. Takashima and H. Hama 507 (2003) 289

Improvement of the field quality in the helical wigglers for the OK-5 VUV FEL at Duke, S.F. Mikhailov, V.N. Litvinenko, N.G. Gavrilov, O.A. Shevchenko, N.A. Vinokurov and P.D. Vobly 507 (2003) 294

Self-consistent harmonic generation in storage ring FELs, C. Rippon, R. Bartolini, G. Dattoli, L. Giannessi, M.E. Couprie and D. Garzella 507 (2003) 299

Section 6. High-Brightness Electron Beams

Overview of high-brightness, high-average-current photoinjectors for FELs, S.J. Russell 507 (2003) 304

Femto-seconds kilo-ampere electron beam generation, X.J. Wang and X.Y. Chang 507 (2003) 310

First operation of a superconducting RF-gun, D. Janssen, H. Büttig, P. Evtushenko, M. Freitag, F. Gabriel, B. Hartmann, U. Lehnert, P. Michel, K. Möller, T. Quast, B. Reppe, A. Schamlott, Ch. Schneider, R. Schurig, J. Teichert, S. Konstantinov, S. Kruchkov, A. Kudryavtsev, O. Myskin, V. Petrov, A. Tribendis, V. Volkov, W. Sandner, I. Will, A. Matheisen, W. Moeller, M. Pekeler, P.v. Stein and Ch. Haberstroh 507 (2003) 314

Theory and simulation of CSR microbunching in bunch compressors, Z. Huang, M. Borland, P. Emma and K.-J. Kim 507 (2003) 318

RF Photoelectric injectors using needle cathodes, J.W. Lewellen and C.A. Brau. 507 (2003) 323

Slice emittance measurements at the SLAC gun test facility, D.H. Dowell, P.R. Bolton, J.E. Clendenin, P. Emma, S.M. Gierman, W.S. Graves, C.G. Limborg, B.F. Murphy and J.F. Schmerge 507 (2003) 327

Longitudinal emittance measurements at the SLAC gun test facility, D.H. Dowell, P.R. Bolton, J.E. Clendenin, S.M. Gierman, C.G. Limborg, B.F. Murphy, J.F. Schmerge and T. Shaftan. 507 (2003) 331

Bunch length and phase stability measurements at the TESLA test facility, Ch. Gerth, J. Feldhaus, K. Honkavaara, K.D. Kavanagh, Ph. Piot, L. Plucinski, S. Schreiber and I. Will 507 (2003) 335

Improvement of electron beam properties by reducing back-bombardment effects in a thermionic RF gun, T. Kii, K. Yamane, I. Tometaka, K. Masuda, H. Ohgaki, K. Yoshikawa and T. Yamazaki. 507 (2003) 340

The SPARC project: a high-brightness electron beam source at LNF to drive a SASE-FEL experiment, D. Alesini, S. Bertolucci, M.E. Biagini, C. Biscari, R. Boni, M. Boscolo, M. Castellano, A. Clozza, G. Di Pirro, A. Drago, A. Esposito, M. Ferrario, V. Fusco, A. Gallo, A. Ghigo, S. Guiducci, M. Incurvati, P. Laurelli, C. Ligi, F. Marcellini, M. Migliorati, C. Milardi, L. Palumbo, L. Pellegrino, M. Preger, P. Raimondi, R. Ricci, C. Sanelli, F. Sgamma, B. Spataro, M. Serio, A. Stecchi, A. Stella, F. Tazzioli, C. Vaccarezza, M. Vescovi, C. Vicario, M. Zobov, E. Acerbi, F. Alessandria, D. Barni, G. Bellomo, I. Boscolo, F. Broggi, S. Cialdi, C. DeMartinis, D. Giove, C. Maroli, V. Petrillo, M. Rome', L. Serafini, E. Chiadroni, G. Felici, D. Levi, M. Mastrucci, M. Mattioli, G. Medici, G.S. Petrarca, L. Catani, A. Cianchi, A. D'Angelo, R. Di Salvo, A. Fantini, D. Moricciani, C. Schaerf, R. Bartolini, F. Ciocci, G. Dattoli, A. Doria, F. Flora, G.P. Gallerano, L. Giannessi, E. Giovenale, G. Messina, L. Mezi, P.L. Ottaviani, L. Picardi, M. Quattromini, A. Renieri, C. Ronsivalle, L. Avaldi, C. Carbone, A. Cricenti, A. Pifferi, P. Perfetti, T. Prosperi, V.R. Albertini, C. Quaresima and N. Zema 507 (2003) 345

VUV FEL driven RF gun, B. Faatz, A.A. Fateev, K. Flöttmann, D. Nölle, Ph. Piot, E.L. Saldin, H. Schlarb, E.A. Schneidmiller, S. Schreiber, D. Sertore, K.P. Sytchev and M.V. Yurkov. 507 (2003) 350

Results of beam parameter measurement of the ELBE electron accelerator after commissioning, J. Teichert, A. Büchner, P. Evtushenko, F. Gabriel, U. Lehnert, P. Michel and J. Voigtländer. 507 (2003) 354

Stability of the LEBRA infrared FEL, K. Yokoyama, I. Sato, K. Hayakawa, T. Tanaka, Y. Hayakawa, K. Kanno, T. Sakai, K. Ishiwata and E. Hashimoto 507 (2003) 357

Section 7. High-Gain, Short-Wavelength FELs

Demonstration of gain saturation and controlled variation of pulse length at the TESLA test facility FEL, J. Rossbach 507 (2003) 362

Study of the statistical properties of the radiation from a VUV SASE FEL operating in the femtosecond regime, V. Ayvazyan, J.-P. Carneiro, P. Castro, B. Faatz, A.A. Fateev, J. Feldhaus, Ch. Gerth, V. Gretchko, B. Grigoryan, U. Hahn, K. Honkavaara, M. Hüning, R. Ischebeck, U. Jastrow, R. Kammering, J. Menzel, M. Minty, D. Nölle, J. Pflüger, Ph. Piot, L. Plucinski, K. Rehlich, J. Rossbach, E.L. Saldin, H. Schlarb, E.A. Schneidmiller, S. Schreiber, R. Sobierajski, B. Steeg, F. Stulle, K.P. Sytchev, K. Tiedtke, R. Treusch, H. Weise, M. Wendt and M.V. Yurkov 507 (2003) 368

Multiple-beam free-electron lasers, H.P. Freund, D. Douglas and P.G. O'Shea 507 (2003) 373

Design considerations for the LCLS, C. Limborg 507 (2003) 378

Status of SPring-8 compact SASE source FEL project, T. Shintake, T. Tanaka, T. Hara, K. Togawa, T. Inagaki, Y.J. Kim, T. Ishikawa, H. Kitamura, H. Baba, H. Matsumoto, S. Takeda, M. Yoshida and Y. Takasu . . . 507 (2003) 382

Bunching and exotic undulator configurations in SASE FELs, G. Dattoli, A. Doria, L. Giannessi and P.L. Ottaviani 507 (2003) 388

Observation of SASE and amplified seed of the DUV-FEL at BNL, A. Doyuran, W. Graves, R. Heese, E.D. Johnson, S. Krinsky, H. Loos, J. Murphy, G. Rakowsky, J. Rose, T. Shaftan, B. Sheehy, J. Skaritka, X.J. Wang and L.H. Yu 507 (2003) 392

Simulation studies of a possible multi-stage XFEL at ELETTRA, W.M. Fawley, W.A. Barletta, C.J. Bocchetta and R. Bonifacio 507 (2003) 396

Simulation of prebunching in free-electron lasers, H.P. Freund, P.G. O'Shea and J. Neumann 507 (2003) 400

Characteristics of the fundamental FEL and the higher harmonic generation at LEBRA, Y. Hayakawa, I. Sato, K. Hayakawa, T. Tanaka, K. Yokoyama, K. Kanno, T. Sakai, K. Ishiwata, K. Nakao and E. Hashimoto. 507 (2003) 404

Characteristic measurements of higher harmonics generated in the SASE-FEL process, R. Kato, M. Fujimoto, T. Igo, S. Isaka, T. Onishi, S. Furukawa, S. Okuda, S. Suemine and G. Isoyama 507 (2003) 409

Time-resolved measurement of a self-amplified free-electron laser, Y. Li, J. Lewellen, Z. Huang, V. Sajaev and S.V. Milton. 507 (2003) 413

Results of the VISA SASE FEL experiment at 840 nm, A. Murokh, R. Agustsson, M. Babzien, I. Ben-Zvi, L. Bertolini, K. van Bibber, R. Carr, M. Cornacchia, P. Frigola, J. Hill, E. Johnson, L. Klaisner, G. Le Sage, M. Libkind, R. Malone, H.-D. Nuhn, C. Pellegrini, S. Reiche, G. Rakowsky, J. Rosenzweig, R. Ruland, J. Skaritka, A. Toor, A. Tremaine, X. Wang and V. Yakimenko 507 (2003) 417

Radiation effects studies at the Advanced Photon Source, M. Petra, P.K. Den Hartog, E.R. Moog, S. Sasaki, N. Sereno and I.B. Vasserman. 507 (2003) 422

Pulse length control in an X-ray FEL by using wakefields, S. Reiche, P. Emma and C. Pellegrini 507 (2003) 426

Scheme for time-resolved experiments based on the use of statistical properties of the third harmonic of the SASE FEL radiation, W. Brefeld, B. Faatz, J. Feldhaus, M. Körfer, J. Krzywinski, T. Möller, J. Pflüger, E.L. Saldin, E.A. Schneidmiller, S. Schreiber and M.V. Yurkov 507 (2003) 431

Pump–probe experiments in the femtosecond regime, combining first and third harmonics of SASE FEL radiation, J. Feldhaus, T. Möller, E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov 507 (2003) 435

Scheme for attophysics experiments at a X-ray SASE FEL, E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov 507 (2003) 439

Measurements of nonlinear harmonic radiation and harmonic microbunching in a visible SASE FEL, A. Tremaine, X.J. Wang, M. Babzien, I. Ben-Zvi, M. Cornacchia, R. Malone, A. Murokh, H.-D. Nuhn, C. Pellegrini, S. Reiche, J. Rosenzweig, J. Skaritka and V. Yakimenko. 507 (2003) 445

High gain free electron lasers driven by flat electron beam, M. Xie. 507 (2003) 450

Simulations for the FERMI@ELETTRA proposal to generate 40- and 10-nm coherent radiation using the HGHG scheme, L.H. Yu and J. Wu 507 (2003) 455

Image charge undulator, Y. Zhang, Y. Derbenev and R. Li. 507 (2003) 459

Section 8. New Concepts and Proposals

Overview of proposed VUV and soft X-ray projects in the world, G. Dattoli and A. Renieri 507 (2003) 464

A cascaded optical klystron on an energy recovery linac – race track microtron, M. Eriksson, L.-J. Lindgren, E. Wallen and S. Werin 507 (2003) 470

X-ray optics research for free electron lasers: study of material damage under extreme fluxes, J. Kuba, A. Wootton, R.M. Bionta, R. Shepherd, E.E. Fill, T. Ditmire, G. Dyer, R.A. London, V.N. Shlyaptsev, J. Dunn, R. Booth, S. Bajt, R.F. Smith, M.D. Feit, R. Levesque and M. McKernan 507 (2003) 475

X-ray Compton FEL based on charged particles channeling in a crystal, H.K. Avetissian and G.F. Mkrtchian 507 (2003) 480

Overview of FERMI@ELETTRA: a proposed ultra-bright coherent X-ray source in Italy, C.J. Bocchetta, D. Bulfone, F. Cargnello, M. Danailov, G. D'Auria, B. Diviacco, M. Ferianis, A. Gambitta, E. Karantzoulis, G. Loda, M. Lonza, F. Mazzolini, D. Morelli, G. Pangon, V. Smaluk, M. Stefanutti, M. Svandrlik, L. Tosi, G. Tromba, A. Vascotto, R. Visintini, R. Bakker, W.A. Barletta, W.M. Fawley, R. Bonifacio, S.G. Biedron, M.D. Borland, S.V. Milton, S. De Silvestri, R.P. Walker, J.H. Wu and L.H. Yu 507 (2003) 485

FEL options for the proposed UK fourth generation light source (4GLS), M.W. Poole and B.W.J. Mc Neil . . 507 (2003) 490

FELICE—the free electron laser for intra-cavity experiments, B.L. Militsyn, G. von Helden, G.J.M. Meijer and A.F.G. van der Meer 507 (2003) 495

Electron beam modulation using a laser-driven photocathode, J.G. Neumann, P.G. O'Shea, D. Demske, W.S. Graves, B. Sheehy, H. Loos and G.L. Carr 507 (2003) 499

Conceptual design of a high-brightness linac for soft X-ray SASE-FEL source, D. Alesini, S. Bertolucci, M.E. Biagini, C. Biscari, R. Boni, M. Boscolo, M. Castellano, A. Clozza, G.D. Pirro, A. Drago, A. Esposito, M. Ferrario, V. Fusco, A. Gallo, A. Ghigo, S. Guiducci, M. Incurvati, P. Laurelli, C. Ligi, F. Marcellini, M. Migliorati, C. Milardi, L. Palumbo, L. Pellegrino, M. Preger, P. Raimondi, R. Ricci, C. Sanelli, F. Sgamma, B. Spataro, M. Serio, A. Stecchi, A. Stella, F. Tazzioli, C. Vaccarezza, M. Vescovi, C. Vicario, M. Zobov, E. Acerbi, F. Alessandria, D. Barni, G. Bellomo, C. Birattari, M. Bonardi, I. Boscolo, A. Bosotti, F. Broggi, S. Cialdi, C. DeMartinis, D. Giove, C. Maroli, P. Michelato, L. Monaco, C. Pagani, V. Petrillo, P. Pierini, L. Serafini, D. Sertore, G. Volpini, E. Chiadroni, G. Felici, D. Levi, M. Mastrucci, M. Mattioli, G. Medici, G.S. Petrarca, L. Catani, A. Cianchi, A. D'Angelo, R.D. Salvo, A. Fantini, D. Moricciani, C. Schaerf, R. Bartolini, F. Ciocci, G. Dattoli, A. Doria, F. Flora, G.P. Gallerano, L. Giannessi, E. Giovenale, G. Messina, L. Mezi, P.L. Ottaviani, L. Picardi, M. Quattromini, A. Renieri, C. Ronsivalle, L. Avaldi, C. Carbone, A. Cricenti, A. Pifferi, P. Perfetti, T. Prosperi, V.R. Albertini, C. Quaresima and N. Zema 507 (2003) 503

SPARC project and SPARX proposal, A. Renieri 507 (2003) 508

Photon ring multi-user distribution system for soft X-ray SASE FEL laboratory, J. Feldhaus, E.L. Saldin, E.A. Schneidmiller and M.V. Yurkov 507 (2003) 511

Section 9. Recent Advances in Experimental Techniques

Extremely compact soft X-ray lasers based on capillary discharges, J.J. Rocca, J. Filevich, E.C. Hammarsten, E. Jankowska, B. Benware, M.C. Marconi, B. Luther, A. Vinogradov, I. Artiukov, S. Moon and V.N. Shlyaptsev 507 (2003) 516

Quasi-optical highly sensitive Schottky-barrier detector for a wide-band FIR FEL, V.V. Kubarev, G.M. Kazakevitch, Y.U. Jeong and B.C. Lee 507 (2003) 524

Recent results with the high intensity γ-ray facility, V.N. Litvinenko 507 (2003) 528

Production of high power femtosecond terahertz radiation, G.R. Neil, G.L. Carr, J.F. Gubeli III, K. Jordan, M.C. Martin, W.R. McKinney, M. Shinn, M. Tani, G.P. Williams and X.-C. Zhang 507 (2003) 538

Section 10. Novel Results in FEL Applications for Biology, Chemistry, Material Sciences, and Medicine

Ultrasensitive spectroscopy of ionic reactive intermediates in the gas phase performed with the first coupling of an IR FEL with an FTICR-MS, P. Maître, S. Le Caër, A. Simon, W. Jones, J. Lemaire, H. Mestdagh, M. Heninger, G. Mauclaire, P. Boissel, R. Prazeres, F. Glotin and J.-M. Ortega 507 (2003) 542

Status report and biomedical applications of the institute of FEL, Osaka University, K. Awazu, M. Asakawa and H. Horiike 507 (2003) 548

Novel process of isotope separation of silicon by use of IR FEL, K. Nomaru, A.V. Chernyshev, A.K. Petrov and H. Kuroda 507 (2003) 553

FEL induced dynamics of small molecules on surfaces: N_2O on NaCl(1 0 0), B. Redlich, L. van der Meer, H. Zacharias, G. Meijer and G. von Helden 507 (2003) 557

Self-trapped states in proteins, R.H. Austin, A. Xie, L. van der Meer, M. Shinn and G. Neil 507 (2003) 562

Gelatin ablation wavelength dependency in the range of 5.6–6.7 μm using a mid-infrared Free Electron Laser, M. Heya, Y. Fukami, H. Nagats, Y. Nishida and K. Awazu 507 (2003) 565

Non-linear infrared properties of InAs/GaAs self-assembled quantum dots, S. Sauvage, P. Boucaud, T. Brunhes, F. Bras, G. Fishman, F. Glotin, R. Prazeres, J.M. Ortega, J.-M. Gérard, M. Broquier, C. Crépin and R.P.S.M. Lobo 507 (2003) 570

Section 11. Pioneering Results Obtained with VUV SASE FELs

Energy absorption of free rare gas clusters irradiated by intense VUV pulses of a free electron laser, J. Schulz, H. Wabnitz, T. Laarmann, P. Gürtler, W. Laasch, A. Swiderski, Th. Möller and A.R.B. de Castro 507 (2003) 573

Ablation of various materials with intense XUV radiation, L. Juha, J. Krása, A. Cejnarová, D. Chvostová, V. Vorlíček, J. Krzywinski, R. Sobierajski, A. Andrejczuk, M. Jurek, D. Klinger, H. Fiedorowicz, A. Bartnik, M. Pfeifer, P. Kubát, L. Pína, J. Kravárik, P. Kubeš, Y.L. Bakshaev, V.D. Korolev, A.S. Chernenko, M.I. Ivanov, M. Scholz, L. Ryc, J. Feldhaus, J. Ullschmied and F.P. Boody 507 (2003) 578

Section 12. Future Scientific and Technological Applications at Existing and Planned FEL Facilities

X-ray free electron laser for electron–positron pair production on the nuclei, H.K. Avetissian, A.K. Avetissian, G.F. Mkrtchian and Kh.V. Sedrakian 507 (2003) 583

Accelerators, Beam Handling and Targets

The LUNA II 400 kV accelerator, A. Formicola, G. Imbriani, M. Junker, D. Bemmerer, R. Bonetti, C. Broggini, C. Casella, P. Corvisiero, H. Costantini, G. Gervino, C. Gustavino, A. Lemut, P. Prati, V. Roca, C. Rolfs, M. Romano, D. Schürmann, F. Strieder, F. Terrasi, H.-P. Trautvetter and S. Zavatarelli 507 (2003) 609

An optimization control program for the ASIPP microbeam, Hu Zhiwen, Yu Zengliang, Wu Lijun, Hu Suhua and Xu An 507 (2003) 617

An X-ray scanner for wire chambers, T. Akesson, E. Arik, K. Assamagan, K. Baker, D. Benjamin, H. Bertelsen, V. Bytchkov, J. Callahan, M. Capeans-Garrido, A. Catinaccio, A. Cetin, P. Cwetanski, H. Danielsson, F. Dittus, B. Dolgoshein, N. Dressnandt, W.L. Ebenstein, P. Eerola, P. Farthouat, D. Froidevaux, Y. Grichkevitch, Z. Hajduk, J.R. Hansen, P.K. Keener, G. Kekelidze, S. Konovalov, T. Kowalski, V.A. Kramarenko, K. Kruger, B. Lundberg, F. Luehring, A. Manara, K. McFarlane, V.A. Mitsou, S. Morozov, S. Muraviev, A. Nadtochy, F.M. Newcomer, J. Olszowska, H. Ogren, S.H. Oh, V. Peshekhonov, M. Price, C. Rembser, A. Romaniouk, D.R. Rust, V. Schegelsky, M. Sapinski, A. Shmeleva, S. Smirnov, L.N. Smirnova, V. Sosnovtsev, S. Soutchkov, E. Spiridenkov, V. Tikhomirov, R. VanBerg, V. Vassilakopoulos, C. Wang and H.H. Williams 507 (2003) 622

Gamma, X-ray and Charged Particle Detectors

Fast pulsed UV light source and calibration of non-linear photomultiplier response, M. Vićić, L.G. Sobotka, J.F. Williamson, R.J. Charity and J.M. Elson 507 (2003) 636

SICANE: a detector array for the measurement of nuclear recoil quenching factors using a monoenergetic neutron beam, E. Simon, L. Bergé, A. Broniatowski, R. Bouvier, B. Chambon, M. De Jésus, D. Drain, L. Dumoulin, J. Gascon, J.-P. Hadjout, A. Juillard, O. Martineau, C. Pastor, M. Stern and L. Vagneron 507 (2003) 643

Space Radiation and Neutrino Detectors

Development of a two-fold segmented detection system for near horizontally cosmic-ray muons to probe the internal structure of a volcano, H. Tanaka, K. Nagamine, N. Kawamura, S.N. Nakamura, K. Ishida and K. Shimomura 507 (2003) 657

Synchrotron Radiation Research

Thermal analysis of YB_{66} crystal of BL15XU at SPring-8 by finite element method, M. Kitamura, H. Yoshikawa, T. Mochizuki, T. Tanaka and S. Fukushima 507 (2003) 670

Special Applications

Novel technique for ultra-sensitive determination of trace elements in organic scintillators, Z. Djurcic, D. Glasgow, L.-W. Hu, R.D. McKeown, A. Piepke, R. Swinney and B. Tipton 507 (2003) 680

Neutron radiation effects on Fabry–Perot fiber optic sensors, H. Liu, J. Talnagi and D.W. Miller 507 (2003) 691

Calibration of the effective analyzing power for a ^{3}He polarimeter at 443 MeV, J. Kamiya, K. Hatanaka, T. Adachi, K. Fujita, K. Hara, T. Kawabata, T. Noro, H. Sakaguchi, N. Sakamoto, Y. Sakemi, Y. Shimbara, Y. Shimizu, S. Terashima, M. Uchida, T. Wakasa, Y. Yasuda, H.P. Yoshida and M. Yosoi 507 (2003) 703